

LLNL Livermore Site First Quarter 2015 Self-Monitoring Report

This quarterly report presents the first quarter 2015 self-monitoring data for the ground water and soil vapor treatment facilities at the Lawrence Livermore National Laboratory (LLNL) Livermore Site. The volumes of ground water and soil vapor treated, and volatile organic compound (VOC) mass removed during the first quarter of 2015 are presented in Tables 1 and 2, respectively. An historical summary of VOC volume and mass removed are presented in Tables 3 and 4, respectively.

Attachment A presents results of ground water treatment facility and extraction well (ground water and soil vapor) VOC, chromium, bioassay, turbidity, and chloride analyses (Tables A-1 through A-5). Metals and radiological analyses are presented in Tables A-6 and A-7, respectively. During the first quarter of 2015, all effluent sample analytical results were within acceptable discharge limits.

Self-monitoring reports for all treatment facilities are presented in Attachment B. Monthly volumes of ground water extracted are shown in Attachment B; however, instantaneous flow rates are not shown for wells that are now only used for sampling and are not continuously pumped. The monthly volume shown for these wells is the quantity of water evacuated for sampling purposes.

A map showing Livermore Site treatment areas and treatment facility locations, and ground water elevation contour maps showing hydraulic capture zones for hydrostratigraphic units (HSUs) 1B, 2, 3A, 3B, 4, and 5, are presented in Attachment C. The contour maps for the individual HSUs are based on data collected during the first quarter of 2015.

Table 1. Volumes of ground water and soil vapor extracted and treated at the Livermore Site, January through March 2015.

Treatment Area^a	Month	Volume of ground water extracted (Kgal)^b	Volume of vapor extracted (Kcf)^b
TFA	January	7,662	-
	February	8,517	-
	March	9,975	-
TFB	January	2,472	-
	February	2,141	-
	March	2,585	-
TFC	January	2,240	-
	February	2,338	-
	March	2,697	-
TFD	January	4,422	1,883
	February	4,830	1,746
	March	6,033	1,828
TFE	January	2,560	1,034
	February	1,950	982
	March	2,543	1,139
TFG	January	335	-
	February	300	-
	March	302	-
TFH	January	717	2,445
	February	497	2,170
	March	524	2,727
TOTAL^c		65,640	15,954

^a Totals include ground water and soil vapor extracted from the following facilities:

TFA area: TFA, TFA-E

TFB area: TFB

TFC area: TFC, TFC-E, TFC-SE

TFD area: TFD, TFD-E, TFD-HPD, TFD-S, TFD-SE, TFD-SS, TFD-W, VTFD-ETCS

TFE area: TFE-E, TFE-HS, TFE-NW, TFE-SE, TFE-SW, TFE-W, VTFE-ELM, VTFE-HS

TFG area: TFG-1, TFG-N

TFH area: TF406, TF406-NW, TF518-N, TF518-PZ, TF5475-1, TF5475-2, TF5475-3, VTF406-HS, VTF511, VTF518-PZ, VTF5475

TFF started operation in February 1993 for fuel hydrocarbon remediation. In August 1995, the regulatory agencies agreed that the vadose zone remediation was complete, and in October 1996 a No Further Action status was granted for the ground water.

^b Totals are derived from individual extraction wells shown in Attachment B.

^c Rounded number.

Kcf = Thousands of cubic feet.

Kgal = Thousands of gallons.

Table 2. VOC mass removed at the Livermore Site, January through March 2015.

Treatment Area^a	VOC mass removed from ground water (kg)	VOC mass removed from soil vapor (kg)	Total VOC mass removed (kg) ^b
TFA	0.8	-	0.8
TFB	0.5	-	0.5
TFC	0.7	-	0.7
TFD	3.8	0.8	4.6
TFE	1.8	0.5	2.3
TFG	0.08	-	0.1
TFH	0.4	4.3	4.7
TOTAL^b	8.1	5.6	13.7

Table 3. Historical summary of volumes of water and soil vapor removed at the Livermore Site through March 2015.

Treatment Area^a	Volume of ground water extracted (Mgal)	Volume of vapor extracted (Mcf)
TFA	2,208	-
TFB	534	-
TFC	599	-
TFD	1,229	144
TFE	443	217
TFG	98	-
TFH	189	307
TOTAL^b	5,300	668

Table 4. Historical summary of VOC mass removed from water and soil vapor at the Livermore Site through March 2015.

Treatment Area^a	VOC mass removed from ground water (kg)	VOC mass removed from soil vapor (kg)	Total VOC mass removed (kg) ^b
TFA	219	-	219
TFB	86	-	86
TFC	116	-	116
TFD	908	101	1,009
TFE	241	159	400
TFG	13	-	13
TFH	43	1,297	1,340
TOTAL^b	1,626	1,557	3,183

^a Refer to Table 1 footnote for facilities in each treatment facility area.^b Rounded number.

Abbreviations for Tables 2, 3 and 4:

kg = Kilograms.

Mcf = Millions of cubic feet.

Mgal = Millions of gallons.

VOC = Volatile organic compound.

Attachment A

VOC, Chromium, Bioassay, Turbidity, Chloride, Metals, and Radiological Analyses

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET -<-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFA													
TFA-I001	15-JAN-15	E601	<0.5	1	<0.5	<0.5	0.96	<1	<0.5	5.7	<0.5	0.61	<0.5
TFA-I001	04-FEB-15	E601	<0.5	0.85	0.52	<0.5	0.88	<1	<0.5	4.9	<0.5	0.5	<0.5
TFA-I001	03-MAR-15	E601	<0.5	0.9	0.59	<0.5	0.96	<1	<0.5	5.1	<0.5	0.59	<0.5
TFA-E^a													
W-254	30-MAR-15	E601	<0.5	<0.5	0.67	<0.5	<0.5	5.9	<0.5	52	<0.5	1.8	<0.5
TFB													
TFB-I002	07-JAN-15	E601	0.51	2.2	<0.5	<0.5	1.1	<1	2.9	1	<0.5	11	<0.5
TFB-I002	02-FEB-15	E601	0.58	2.2	<0.5	<0.5	1.2	<1	3.2	1.1	<0.5	12	<0.5
TFB-I002	02-MAR-15	E601	0.53	2.2	<0.5	<0.5	1.3	<1	3	1.1	<0.5	11	<0.5
TFB-E^a													
TFB-E002	07-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	02-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	02-MAR-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC													
TFC-I003	05-JAN-15	E601	<0.5	1.1	<0.5	<0.5	0.77	<1	9	3.1	<0.5	10	<0.5
TFC-I003	02-FEB-15	E601	<0.5	1	<0.5	<0.5	0.74	<1	8.9	3.3	<0.5	11	<0.5
TFC-I003	02-MAR-15	E601	<0.5	1.1	<0.5	<0.5	0.79	<1	9	3.4	<0.5	11	<0.5
TFC-E^a													
TFC-E003	05-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E003	02-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E003	02-MAR-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E^b													
MTU1-I	15-JAN-15	E601	<0.5	3.9	<0.5	<0.5	<0.5	<1	17	0.63	<0.5	4.8	0.86
MTU1-I	22-JAN-15	E601	<0.5	9.2	<0.5	<0.5	0.76	<1	15	0.63	<0.5	7.4	3.2
MTU1-I	28-JAN-15	E601	<0.5	9.8	<0.5	<0.5	0.75	<1	13	0.52	<0.5	7.4	3.5
MTU1-I	11-FEB-15	E601	<0.5	11	<0.5	<0.5	0.83	<1	14	0.59	<0.5	8	3.8
MTU1-I	09-MAR-15	E601	<0.5	11	<0.5	<0.5	0.79	<1	14	0.91	<0.5	8.8	4
MTU1-E													
MTU1-E	15-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU1-E	22-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU1-E	28-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFC-E (cont.)													
MTU1-E	11-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU1-E	09-MAR-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-SE													
PTU1-I	12-JAN-15	E601	<0.5	6.9	<0.5	<0.5	3.9	<1	7.3	<0.5	<0.5	24	0.62
PTU1-I	02-FEB-15	E601	<0.5	6.7	<0.5	<0.5	3.4	<1	7.6	<0.5	<0.5	22	0.66
PTU1-I	02-MAR-15	E601	<0.5	8.2	<0.5	<0.5	3.9	<1	8.9	<0.5	<0.5	22	0.75
PTU1-E	12-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU1-E	02-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU1-E	02-MAR-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD													
TFD-I004	05-JAN-15	E601	2.3	3	<0.5	<0.5	0.84	<1	0.56	0.71	<0.5	47	<0.5
TFD-I004	04-FEB-15	E601	2.5	3	<0.5	<0.5	0.86	<1	0.62	0.73	<0.5	47	<0.5
TFD-I004	03-MAR-15	E601	2	2.2	<0.5	<0.5	<0.5	<1	<0.5	0.5	<0.5	41	16
TFD-E004	05-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-E004	04-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-E004	03-MAR-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-E													
PTU8-I	07-JAN-15	E601	3.1	0.95	<0.5	<0.5	3.5	<1	<0.5	3.2	<0.5	62	0.95
PTU8-I	04-FEB-15	E601	3.2	1	<0.5	0.56	4.2	<1	<0.5	3.6	<0.5	67	1.2
PTU8-I	03-MAR-15	E601	3.2	1	<0.5	0.57	4.7	<1	<0.5	3.7	<0.5	67	0.98
PTU8-E	07-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU8-E	04-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU8-E	03-MAR-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-HPD													
PTU10-I	20-JAN-15	E601	1.4	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	35	<0.5
PTU10-I	05-FEB-15	E601	1.6	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	36	<0.5
PTU10-I	03-MAR-15	E601	1.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	37	<0.5
PTU10-E	20-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU10-E	05-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU10-E	03-MAR-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET -<	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFD-S													
PTU2-I	08-JAN-15	E601	0.63	2	<0.5	<0.5	3.4	<1	1.1	5.7	<0.5	47	<0.5
PTU2-I	18-FEB-15	E601	0.7	2.6	<0.5	<0.5	3.5	<1	1.2	5.3	<0.5	49	<0.5
PTU2-I	16-MAR-15	E601	0.67	2.2	<0.5	<0.5	3.3	<1	1.1	4.9	<0.5	46	<0.5
PTU2-E	08-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	18-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	16-MAR-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-SE													
PTU11-I	07-JAN-15	E601	<0.5	2.5	0.6	1.1	7.9	<1	0.64	23	<0.5	71	<0.5
PTU11-I	02-FEB-15	E601	<0.5	<0.5	<0.5	0.62	4.1	<1	<0.5	15	<0.5	31	<0.5
PTU11-I	02-MAR-15	E601	<0.5	2.4	0.61	0.97	7.6	<1	0.58	21	<0.5	68	<0.5
PTU11-E	07-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU11-E	02-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU11-E	02-MAR-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-SS													
PTU12-I	13-JAN-15	E601	1.9	2.2	<0.5	1.3	6.7	<1	0.51	12	<0.5	92	9.4
PTU12-I	18-FEB-15	E601	2	2.3	<0.5	1.1	6.8	<1	0.52	12	<0.5	89	10
PTU12-I	10-MAR-15	E601	1.7	2.4	0.56	1.9	9.9	<1	0.52	17	<0.5	110	4.8
PTU12-E	13-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU12-E	18-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU12-E	10-MAR-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	0.73	<0.5
TFD-W													
PTU6-I	14-JAN-15	E601	<0.5	4.9	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.2	32
PTU6-I	05-FEB-15	E601	<0.5	4.9	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.4	34
PTU6-I	06-MAR-15	E601	<0.5	5.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.5	32
PTU6-E	14-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU6-E	05-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU6-E	06-MAR-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-E													
PTU3-I	13-JAN-15	E601	<0.5	2.7	<0.5	<0.5	6.6	<1	5.9	8.1	<0.5	62	<0.5
PTU3-I	02-FEB-15	E601	0.51	2.9	<0.5	<0.5	6.9	<1	6.2	8.1	<0.5	64	<0.5
PTU3-I	02-MAR-15	E601	<0.5	3	<0.5	<0.5	6.9	<1	6.2	7.8	<0.5	63	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFE-E (cont.)													
PTU3-E	13-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU3-E	02-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU3-E	02-MAR-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-HS													
GTU07-I	12-JAN-15	E601	2.9	1.7	<0.5	<0.5	4.4	1.9	2.1	5.6	<0.5	220	<0.5
GTU07-I	02-FEB-15	E601	2.8	1.4	<0.5	<0.5	3.5	1.5	1.5	4	<0.5	180	<0.5
GTU07-I	04-MAR-15	E601	3.5	1.9	<0.5	<0.5	5.1	2.2	2.4	6.2	<0.5	230	<0.5
GTU07-E	12-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU07-E	02-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU07-E	04-MAR-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-NW													
PTU9-I	13-JAN-15	E601	<0.5	1.1	<0.5	<0.5	<0.5	<1	0.98	<0.5	<0.5	13	<0.5
PTU9-I	11-FEB-15	E601	<0.5	1.2	<0.5	<0.5	<0.5	<1	1	<0.5	<0.5	13	<0.5
PTU9-I	10-MAR-15	E601	<0.5	1.2	<0.5	<0.5	<0.5	<1	1	<0.5	<0.5	12	<0.5
PTU9-E	13-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU9-E	11-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU9-E	10-MAR-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-SE													
W-359	12-JAN-15	E601	2.4	1.5	<0.5	<0.5	9.9	<1	4.8	6	<0.5	150	<0.5
MTU04-I	02-FEB-15	E601	2.7	2	<0.5	<0.5	11	<1	6	7	<0.5	150	<0.5
MTU04-I	02-MAR-15	E601	2	2.5	<0.5	<0.5	13	<1	6.9	7.2	<0.5	140	<0.5
MTU04-E	12-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU04-E	02-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU04-E	02-MAR-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-SW^c													
MTU03-I	13-JAN-15	E601	1.2	1.4	<0.5	<0.5	0.68	<1	0.51	1.2	<0.5	31	<0.5
MTU03-I	05-MAR-15	E601	1.6	1.3	<0.5	<0.5	0.81	<1	0.59	1.5	<0.5	38	<0.5
MTU03-E	13-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU03-E	05-MAR-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFE-W													
MTU05-I	13-JAN-15	E601	<0.5	0.96	<0.5	<0.5	1.4	<1	8.4	6.4	<0.5	27	<0.5
MTU05-I	05-FEB-15	E601	<0.5	0.83	<0.5	<0.5	1.2	<1	7.1	5.6	<0.5	24	<0.5
MTU05-I	03-MAR-15	E601	<0.5	0.94	<0.5	<0.5	1.4	<1	8.1	6	<0.5	26	<0.5
TFG-1													
W-1111	07-JAN-15	E601	3.6	8.6	<0.5	<0.5	0.72	<1	<0.5	0.89	<0.5	3.7	<0.5
GTU01-I	10-FEB-15	E601	3.3	9.4	<0.5	<0.5	0.76	<1	<0.5	0.95	<0.5	4	<0.5
GTU01-I	10-MAR-15	E601	3.5	9.5	<0.5	<0.5	0.74	<1	<0.5	0.96	<0.5	4	<0.5
TFG-N													
MTU02-I	14-JAN-15	E601	<0.5	1.2	<0.5	<0.5	1.2	<1	1.1	16	<0.5	4.5	<0.5
MTU02-I	10-FEB-15	E601	<0.5	1.4	<0.5	<0.5	1.5	<1	1.4	19	<0.5	5.3	<0.5
MTU02-I	10-MAR-15	E601	<0.5	1.2	<0.5	<0.5	1.3	<1	1.2	16	<0.5	4.5	<0.5
TF406													
PTU5-I	14-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.7	<0.5
PTU5-I	05-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4	<0.5
PTU5-I	05-MAR-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.7	<0.5
TF406-NW^d													
W-1801	07-JAN-15	E601	<0.5	1.4	<0.5	<0.5	<0.5	<1	2.8	0.76	<0.5	19	<0.5
GTU03-E	07-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TF518-N^e													
W-1410	04-MAR-15	E601	2	2.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	12	<0.5
TF5475-1^f													
W-1302-2	23-FEB-15	E601	2.1	37	1.4	5	26	2.4	10	56	<0.5	400	<0.5
TF5475-2													
GTU09-I	07-JAN-15	E601	1.6	17	0.51	2.6	14	<1	4.8	31	<0.5	240	<0.5
GTU09-I	11-FEB-15	E601	1.4	18	0.54	2.7	16	<1	4.9	33	<0.5	240	<0.5
GTU09-I	16-MAR-15	E601	1.6	17	0.52	2.5	15	<1	4.4	30	<0.5	260	<0.5
GTU09-E	07-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU09-E	11-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU09-E	16-MAR-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF5475-3^g	---	---	--	--	--	--	--	--	--	--	--	--	--

Notes on following page.

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

^a TFA-E did not operate during the reporting period due to well W-254 being dry due to dewatering in the area.

^b TFC-E was sampled multiple times during the month of January due to REVAL Operational Testing & Verification of the system.

^c TFE-SW did not operate during the month of February due to an internal failure of one of the Granular Activated Carbon vessels.

^d TF406-NW did not operate during the months of February and March due to biofouling causing a pump failure. The extraction well pump was replaced.

^e TF518-N did not operate during the reporting period due to mixed waste disposition issues.

^f TF5475-1 did not operate during this reporting period due to mixed waste disposition issues.

^g TF5475-3 did not operate during this reporting period due to mixed waste disposition issues.

Notes:

CTET = Carbon tetrachloride

CFORM = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = Volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFA													
W-109	21-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	0.59	0.81	<0.5	<0.5	<0.5
W-262	21-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
W-404	21-JAN-15	E601	<0.5	<0.5	0.58	<0.5	0.82	<1	<0.5	3.5	<0.5	<0.5	<0.5
W-408	21-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
W-415	21-JAN-15	E601	<0.5	1.6	0.51	<0.5	1.1	<1	<0.5	9.4	<0.5	0.93	<0.5
W-457	21-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	0.52	<1	<0.5	4.4	<0.5	<0.5	<0.5
W-518	21-JAN-15	E601	<0.5	<0.5	5.3	<0.5	2.7	<1	<0.5	3.9	<0.5	<0.5	<0.5
W-522	21-JAN-15	E601	<0.5	<0.5	1.3	<0.5	0.78	<1	<0.5	2.5	<0.5	<0.5	<0.5
W-605	21-JAN-15	E601	<0.5	<0.5	0.7	<0.5	0.82	<1	<0.5	11	<0.5	0.51	<0.5
W-614	21-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	4.1	<0.5	<0.5	<0.5
W-712	21-JAN-15	E601	2.8	2.7	0.94	<0.5	3.2	<1	<0.5	1.9	<0.5	2.9	<0.5
W-714	21-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	5.4	<0.5	<0.5	<0.5
W-903	21-JAN-15	E601	<0.5	<0.5	0.69	<0.5	0.6	<1	<0.5	3.8	<0.5	<0.5	<0.5
W-904	04-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	0.58	<1	<0.5	3.9	<0.5	<0.5	<0.5
W-1001	21-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
W-1004	21-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	1.9	<0.5	<0.5	<0.5
W-1009	21-JAN-15	E601	0.95	4	0.54	<0.5	2.4	<1	<0.5	9	<0.5	1.5	<0.5
TFA-E^a													
W-254	30-MAR-15	E601	<0.5	<0.5	0.67	<0.5	<0.5	5.9	<0.5	52	<0.5	1.8	<0.5
TFB													
W-357	07-JAN-15	E601	1.6	2.8	<0.5	<0.5	1	<1	3.7	1.2	<0.5	31	<0.5
W-610	07-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	0.83	<1	0.94	0.6	<0.5	1.3	<0.5
W-620 ^b	02-OCT-14	E601	<0.5	0.87	<0.5	<0.5	0.91	<1	1.2	0.83	<0.5	3	<0.5
W-621	07-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	1.1	<0.5
W-655	07-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	5.3	<0.5	<0.5	0.62	<0.5
W-704	07-JAN-15	E601	0.55	3.4	<0.5	<0.5	1.8	<1	5.6	2.2	<0.5	16	<0.5
W-1423	07-JAN-15	E601	0.68	4	<0.5	<0.5	2.6	<1	2.9	1.7	<0.5	7.8	<0.5
W-2501	07-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	1.3	<0.5	<0.5	4	<0.5
W-2502	07-JAN-15	E601	0.5	2.4	<0.5	<0.5	1.3	<1	<0.5	<0.5	<0.5	2.2	<0.5
TFC													
W-701	05-JAN-15	E601	<0.5	2	<0.5	<0.5	1.5	<1	21	1.7	<0.5	16	<0.5
W-1015	02-FEB-15	E601	<0.5	0.55	<0.5	<0.5	<0.5	<1	2.4	1.6	<0.5	5.4	<0.5
W-1102	02-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	2.3	<0.5	<0.5	1.4	<0.5
W-1103	02-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	0.63	<0.5
W-1104	05-JAN-15	E601	<0.5	0.6	<0.5	<0.5	<0.5	<1	2.4	4.1	<0.5	7.8	<0.5
W-1116	05-JAN-15	E601	<0.5	1.3	<0.5	<0.5	<0.5	<1	4.2	2.7	<0.5	3	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFC-E													
W-368	15-JAN-15	E601	<0.5	3.4	<0.5	<0.5	<0.5	<1	17	2.8	<0.5	11	2.7
W-413	15-JAN-15	E601	<0.5	3.9	<0.5	<0.5	<0.5	<1	17	<0.5	<0.5	4.3	0.69
TFC-SE													
W-1213	26-MAR-15	E601	<0.5	6.5	<0.5	<0.5	3.7	<1	7.6	<0.5	<0.5	22	0.56
W-2201	26-MAR-15	E601	<0.5	5.4	<0.5	<0.5	0.84	<1	17	0.73	<0.5	14	1.2
TFD													
W-351	05-JAN-15	E601	20	3.4	<0.5	0.79	6.1	<1	3.7	5.7	<0.5	340	1.3
W-653	05-JAN-15	E601	15	4.7	<0.5	<0.5	0.57	<1	2.2	0.62	<0.5	410	<0.5
W-906	04-FEB-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.2	<0.5
W-907-2 ^b	07-OCT-14	E601	<0.5	3	<0.5	<0.5	2.1	<1	1.2	4.3	<0.5	41	<0.5
W-2011	05-JAN-15	E601	0.75	0.7	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	17	<0.5
W-2101	05-JAN-15	E601	3.1	1.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	110	<0.5
W-2102	05-JAN-15	E601	11	3.7	<0.5	<0.5	<0.5	<1	1.2	<0.5	<0.5	300	1.8
W-1206	05-JAN-15	E601	0.68	2.9	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	11	<0.5
W-1208	03-MAR-15	E601	1.7	1.8	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	36	26
TFD-E													
W-2006	07-JAN-15	E601	0.98	1.8	2.9	9.5	99	1.5	<0.5	84	<0.5	500	<0.5
W-1301	07-JAN-15	E601	7.6	2.3	1.4	4.7	38	<1	0.69	28	<0.5	210	<0.5
W-1303	07-JAN-15	E601	2.9	1.7	<0.5	1	3.2	<1	<0.5	3.8	<0.5	98	6.4
W-1306	07-JAN-15	E601	2	1.1	<0.5	<0.5	<0.5	<1	<0.5	1.6	<0.5	42	<0.5
W-1307	07-JAN-15	E601	3	0.59	<0.5	<0.5	<0.5	<1	<0.5	0.64	<0.5	35	<0.5
W-1550	07-JAN-15	E601	5.6	3.7	<0.5	<0.5	0.63	<1	<0.5	1.8	<0.5	130	<0.5
W-2203	07-JAN-15	E601	8.4	2.3	<0.5	<0.5	1.6	<1	1.7	5.1	<0.5	87	<0.5
TFD-HPD													
W-1254	20-JAN-15	E601	1.4	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	36	<0.5
W-1650	21-JAN-15	E601	1.1	1.5	<0.5	<0.5	<0.5	1.3	<0.5	<0.5	<0.5	81	<0.5
W-1653	21-JAN-15	E601	<0.5	0.5	<0.5	<0.5	<0.5	13	<0.5	<0.5	<0.5	30	<0.5
W-1655	21-JAN-15	E601	<0.5	1	<0.5	<0.5	<0.5	<1	<0.5	0.94	<0.5	32	<0.5
W-1657	21-JAN-15	E601	7.4	3.3	<0.5	<0.5	<0.5	<1	2.2	<0.5	<0.5	780	<0.5
TFD-S													
W-1503	08-JAN-15	E601	1.5	1.3	<0.5	<0.5	1	<1	<0.5	1.8	<0.5	41	<0.5
W-1504	08-JAN-15	E601	<0.5	0.86	<0.5	<0.5	7.4	<1	2.1	11	<0.5	57	<0.5
W-1510	08-JAN-15	E601	<0.5	1.2	<0.5	<0.5	3.1	<1	0.63	6.1	<0.5	43	<0.5
W-2601	08-JAN-15	E601	<0.5	6	<0.5	<0.5	2.4	<1	1.5	4.5	<0.5	49	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFD-SE													
W-314	07-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	0.95	<1	<0.5	1.8	<0.5	9.6	<0.5
W-2005	07-JAN-15	E601	0.55	0.6	<0.5	1.1	14	<1	<0.5	32	<0.5	71	<0.5
W-1308	07-JAN-15	E601	<0.5	1.3	0.76	2.4	12	<1	<0.5	55	<0.5	90	<0.5
W-1403	07-JAN-15	E601	1.8	15	1.1	4.4	32	<1	3.5	81	<0.5	270	<0.5
W-1904 ^b	02-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	1.4	<1	<0.5	13	<0.5	6	<0.5
SIP-ETC-201	18-MAR-15	E601	<0.5	0.67	2.5	0.88	70	<1	<0.5	380	<0.5	230	<0.5
TFD-SS													
W-1523	13-JAN-15	E601	3.3	2.8	<0.5	1.5	12	<1	1.2	16	<0.5	120	<0.5
W-1601	13-JAN-15	E601	3.1	3.2	1.1	4.5	20	<1	1.1	78	<0.5	200	<0.5
W-1602	13-JAN-15	E601	<0.5	1.8	<0.5	<0.5	<0.5	<1	<0.5	0.91	<0.5	9.2	3
W-1603	13-JAN-15	E601	1.5	1.8	<0.5	1	4.6	<1	<0.5	7.9	<0.5	78	14
TFD-W													
W-1215	14-JAN-15	E601	<0.5	8.3	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.9	16
W-1216	14-JAN-15	E601	<0.5	4.6	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	2	23
W-1902	14-JAN-15	E601	<0.5	3	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.3	47
TFE-E													
W-566	13-JAN-15	E601	0.51	3.1	<0.5	<0.5	4.8	<1	6.7	4.4	<0.5	52	<0.5
W-1109	13-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	17	<1	3.2	30	<0.5	130	<0.5
W-1903	13-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	15	<1	4.4	14	<0.5	29	<0.5
W-1909 ^b	14-NOV-11	E601	<0.5	<0.5	<0.5	<0.5	9.1	1.1	<0.5	5.4	<0.5	6.5	<0.5
W-2305 ^b	01-OCT-14	E601	<0.5	<0.5	<0.5	<0.5	11	<1	2.7	18	<0.5	39	<0.5
TFE-HS													
W-2105	12-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	0.57	3.3	<0.5	44	<0.5
W-2801	12-JAN-15	E601	3.8	2	<0.5	<0.5	5.2	2	1.8	3.9	<0.5	240	<0.5
TFE-NW													
W-1211	13-JAN-15	E601	<0.5	1.5	<0.5	<0.5	<0.5	<1	1.4	<0.5	<0.5	7.9	<0.5
W-1409	13-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	1.5	<0.5	32	<0.5
TFE-SE													
W-359	12-JAN-15	E601	2.4	1.5	<0.5	<0.5	9.9	<1	4.8	6	<0.5	150	<0.5
TFE-SW													
W-1516	13-JAN-15	E601	<0.5	1	<0.5	<0.5	<0.5	<1	0.55	<0.5	<0.5	7.3	<0.5
W-1518	13-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	1.4	1.1	0.63	0.55	<0.5	9.5	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET -<-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFE-SW (cont.)													
W-1520	13-JAN-15	E601	4.8	2.9	<0.5	1.4	0.94	<1	<0.5	5.3	<0.5	98	<0.5
W-1522	13-JAN-15	E601	8.5	4.6	<0.5	2	5	4.7	0.63	8.8	<0.5	200	<0.5
TFE-W													
W-292	13-JAN-15	E601	<0.5	0.76	<0.5	<0.5	0.84	2	1.1	1.2	<0.5	17	<0.5
W-305	13-JAN-15	E601	<0.5	0.94	<0.5	<0.5	1.5	<1	9.8	8.3	<0.5	29	<0.5
TFG-1													
W-1111	07-JAN-15	E601	3.6	8.6	<0.5	<0.5	0.72	<1	<0.5	0.89	<0.5	3.7	<0.5
TFG-N													
W-1806	14-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	5.5	<0.5	1.6	<0.5
W-1807	14-JAN-15	E601	<0.5	1.3	<0.5	<0.5	1.4	<1	1.3	18	<0.5	4.7	<0.5
TF406													
W-1309	14-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	2.2	<0.5
W-1310	14-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.7	<0.5
TF406-NW													
W-1801	07-JAN-15	E601	<0.5	1.4	<0.5	<0.5	<0.5	<1	2.8	0.76	<0.5	19	<0.5
TF518-N^a													
W-1410	04-MAR-15	E601	2	2.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	12	<0.5
TF518-PZ													
W-1615	18-MAR-15	E601	<0.5	<0.5	<0.5	<0.5	2.4	<1	<0.5	28	<0.5	160	<0.5
W-518-1913 ^b	23-MAY-11	E601	<0.5	<0.5	<0.5	<0.5	0.76	<1	<0.5	3.8	<0.5	29	<0.5
W-518-1914	18-MAR-15	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	46	<0.5	3.2	<0.5
W-518-1915	18-MAR-15	E601	<0.5	0.72	<0.5	<0.5	2.3	<1	<0.5	44	<0.5	390	<0.5
SVB-518-201 ^b	07-FEB-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	35	<0.5	8.5	<0.5
SVB-518-204 ^b	07-FEB-08	E601	<0.5	0.63	<0.5	<0.5	1.4	<1	<0.5	43	<0.5	550	<0.5
TF5475-1^a													
W-1302-2	23-FEB-15	E601	2.1	37	1.4	5	26	2.4	10	56	<0.5	400	<0.5
TF5475-2													
W-1108	07-JAN-15	E601	1.6	18	0.51	2.6	14	<1	4.9	32	<0.5	230	<0.5
W-1415 ^b	04-SEP-14	E601	1.4	14	<0.5	2.2	12	<1	4.2	24	<0.5	210	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TF5475-3^a													
W-1604 ^c	24-MAR-15	E601	3.7	67	1.7	19	29	<2.5	7.7	75	<1.2	890	<1.2
W-1605	12-MAR-15	E601	<0.5	21	<0.5	2.1	1.1	<1	<0.5	3.2	<0.5	41	<0.5
W-1608	12-MAR-15	E601	<0.5	16	<0.5	2.4	0.63	<1	<0.5	2.2	<0.5	16	<0.5
W-1609	12-MAR-15	E601	<0.5	24	<0.5	1.9	2.9	<1	<0.5	7.4	<0.5	60	<0.5

Notes on following page.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

^a Treatment Facility did not operate during reporting period. Please refer to Table A-1 for details.

^b Most recent VOC sample results available.

^c Elevated reporting limit due to sample dilution.

Notes:

CTET = Carbon tetrachloride

CFORM = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = Volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE PPM(V/V)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
VTFD-ETCS													
W-1904	11-FEB-15	TO15DIT	<0.044	<0.044	<0.044	<0.044	<0.044	<0.044	<0.044	0.17	<0.044	0.06	<0.044
W-ETC-2003	11-FEB-15	TO15DIT	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	0.061	<0.018	0.018	<0.018
W-ETC-2004A	11-FEB-15	TO15DIT	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	0.23	<0.071	<0.071	<0.071
W-ETC-2004B	11-FEB-15	TO15DIT	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	0.3	<0.27	1.1	<0.27
SIP-ETC-201	11-FEB-15	TO15DIT	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	0.16	<0.034	0.19	<0.034
VTFE-ELM													
W-1903	17-MAR-15	TO15DIT	<0.18	<0.18	<0.18	<0.18	0.6	<0.18	<0.18	0.56	<0.18	1.4	<0.18
W-1909 ^a	30-SEP-14	TO15DIT	<0.005	<0.005	0.0082	<0.005	1.2	<0.005	0.38	0.71	<0.005	1.6	<0.005
W-2305 ^a	06-OCT-11	TO15DIT	<0.005	<0.005	<0.005	<0.005	0.2	<0.005	0.036	0.46	<0.005	0.55	<0.005
W-543-001	17-MAR-15	TO15DIT	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	0.51	<0.11	0.23	<0.11
W-543-003	17-MAR-15	TO15DIT	<0.11	<0.11	<0.11	<0.11	0.14	<0.11	<0.11	0.3	<0.11	0.69	<0.11
W-543-1908	17-MAR-15	TO15DIT	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	0.26	<0.12
VTFE-HS													
W-2105	11-FEB-15	TO15DIT	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	1.5	<0.3
W-ETS-2008A	11-FEB-15	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0073	<0.005	0.011	<0.005
W-ETS-2008B	11-FEB-15	TO15DIT	<0.089	<0.089	<0.089	<0.089	<0.089	<0.089	<0.089	0.32	<0.089	0.43	<0.089
W-ETS-2009	11-FEB-15	TO15DIT	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	0.088	<0.062	0.22	<0.062
W-ETS-2010A	11-FEB-15	TO15DIT	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64
W-ETS-2010B	11-FEB-15	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0099	<0.005
VTF406-HS													
W-217	11-FEB-15	TO15DIT	0.086	0.038	<0.031	<0.031	0.59	<0.031	0.12	0.43	<0.031	1.4	<0.031
W-514-2007A	11-FEB-15	TO15DIT	<0.97	<0.97	<0.97	<0.97	2.5	<0.97	<0.97	1.3	<0.97	5	<0.97
W-514-2007B	11-FEB-15	TO15DIT	<0.12	<0.12	<0.12	<0.12	0.14	<0.12	<0.12	<0.12	<0.12	0.33	<0.12
VTF511													
W-2204	16-MAR-15	TO15DIT	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	5.4	<1.3
W-2205	16-MAR-15	TO15DIT	<0.0091	<0.0091	<0.0091	<0.0091	<0.0091	<0.0091	<0.0091	0.019	<0.0091	0.047	<0.0091
W-2206	16-MAR-15	TO15DIT	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	1.4	<0.25
W-2207A	16-MAR-15	TO15DIT	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	0.14	<0.024
W-2207B	11-FEB-15	TO15DIT	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	0.56	<0.19
W-2208A	16-MAR-15	TO15DIT	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	2.1	<0.41
W-2208B	11-FEB-15	TO15DIT	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	7.6
VTF518-PZ													
W-1615	16-MAR-15	TO15DIT	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	<0.67	1.6	<0.67	2.3	<0.67
W-518-1913	16-MAR-15	TO15DIT	<1.4	<1.4	<1.4	<1.4	2.1	<1.4	<1.4	3.2	<1.4	13	<1.4

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE PPM(V/V)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
VTF518-PZ (cont.)													
W-518-1914	16-MAR-15	TO15DIT	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	2.1	<0.39	<0.39	<0.39
W-518-1915	16-MAR-15	TO15DIT	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	0.97	<0.13	0.32	<0.13
SVB-518-201	16-MAR-15	TO15DIT	<0.013	<0.013	<0.013	<0.013	0.015	<0.013	<0.013	0.039	<0.013	0.078	<0.013
SVB-518-204	16-MAR-15	TO15DIT	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	0.86	<0.19
VTF5475^b													
W-1605	12-MAR-15	TO15DIT	<0.005	0.0053	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.028	<0.005
W-1608	12-MAR-15	TO15DIT	<0.005	0.058	<0.005	<0.005	0.019	<0.005	0.011	0.029	<0.005	0.16	<0.005
W-2211	17-MAR-15	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-2212	17-MAR-15	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-ETS-507	12-MAR-15	TO15DIT	<0.005	0.85	<0.005	0.016	0.0057	<0.005	<0.005	0.22	<0.005	0.8	<0.005
W-2302	24-MAR-15	TO15DIT	<0.18	0.38	<0.18	<0.18	<0.18	<0.18	<0.18	0.29	<0.18	1.6	<0.18
W-2303	17-MAR-15	TO15DIT	<0.11	0.58	<0.11	<0.11	0.11	<0.11	<0.11	0.49	<0.11	2.2	<0.11
SVI-ETS-504	17-MAR-15	TO15DIT	<0.13	0.2	<0.13	<0.13	<0.13	<0.13	<0.13	0.14	<0.13	0.6	<0.13

Notes on following page.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

^a Most recent VOC vapor sample results available.

^b VTF5475 did not operate during reporting period due to mixed waste disposition issues.

Notes:

CTET = Carbon tetrachloride

CFORM = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = Volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-4. Chromium analyses of influent, effluent and receiving water samples by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Chromium (total)^a mg/L (ppm)	Hexavalent Chromium mg/L (ppm)
TFA	TFA-I001	15-JAN-15	0.0099	NA
	TFA-E001	15-JAN-15	0.0091	0.01
TFB	TFB-I002	07-JAN-15	0.016	NA
	TFB-E002	07-JAN-15	0.011	0.011
	TFB-E002	02-FEB-15	0.011	NA
	TFB-E002	02-MAR-15	0.011	NA
	TFB-R002	07-JAN-15	0.01	NA
TFC	TFC-I003	05-JAN-15	0.016	NA
	TFC-E003	05-JAN-15	0.011	0.013
	TFC-E003	02-FEB-15	0.012	NA
	TFC-E003	02-MAR-15	0.013	NA
	TFC-R003	05-JAN-15	0.0029	NA
TFC-E	MTU1-I	15-JAN-15	0.021	NA
	MTU1-E	15-JAN-15	<0.005	<0.005
	MTU1-E	11-FEB-15	0.01	NA
	MTU1-E	09-MAR-15	0.0032	NA
TFC-SE	PTU1-I	12-JAN-15	0.03	NA
	PTU1-E	12-JAN-15	<0.005	<0.005
	PTU1-E	02-FEB-15	<0.001	NA
	PTU1-E	02-MAR-15	<0.001	NA
TFD	TFD-I004	05-JAN-15	0.012	NA
	TFD-E004	05-JAN-15	0.012	0.014
TFD-E	PTU8-I	07-JAN-15	0.0055	NA
	PTU8-E	07-JAN-15	0.0055	0.0056
TFD-HPD	PTU10-I	20-JAN-15	0.0085	NA
	PTU10-E	20-JAN-15	0.01	0.012
TFD-S	PTU2-I	08-JAN-15	0.0093	NA
	PTU2-E	08-JAN-15	0.0091	<0.005
TFD-SE	PTU11-I	07-JAN-15	0.0076	NA
	PTU11-E	07-JAN-15	0.0077	0.0084
TFD-SS	PTU12-I	13-JAN-15	0.009	NA
	PTU12-E	13-JAN-15	0.0075	0.01
TFD-W	PTU6-I	14-JAN-15	0.008	NA
	PTU6-E	14-JAN-15	0.0076	0.0091
TFE-E	PTU3-I	13-JAN-15	0.0072	NA
	PTU3-E	13-JAN-15	0.0068	0.0086
TFE-HS	GTU07-I	12-JAN-15	0.0051	NA
	GTU07-E	12-JAN-15	<0.005	<0.005
TFE-NW	PTU9-I	13-JAN-15	0.0075	NA
	PTU9-E	13-JAN-15	0.0076	0.0099
TFE-SE	W-359	12-JAN-15	0.0067	NA
	MTU04-E	12-JAN-15	0.0055	0.0068

Table A-4. Chromium analyses of influent, effluent and receiving water samples by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Chromium (total)^a mg/L (ppm)	Hexavalent Chromium mg/L (ppm)
TFE-SW	MTU03-I	13-JAN-15	0.0097	NA
	MTU03-E	13-JAN-15	0.01	0.012
TFE-W	MTU05-I	13-JAN-15	0.009	NA
	MTU05-E	13-JAN-15	0.01	0.011
TFG-1	W-1111	07-JAN-15	0.0064	NA
	GTU01-E	07-JAN-15	<0.001	<0.005
	TFG-ASW	07-JAN-15	0.011	NA
TFG-N	MTU02-I	14-JAN-15	0.0078	NA
	MTU02-E	14-JAN-15	0.0066	0.0068
TF406	PTU5-I	14-JAN-15	0.011	NA
	PTU5-E	14-JAN-15	0.01	0.012
TF406-NW	W-1801	07-JAN-15	<0.001	NA
	GTU03-E	07-JAN-15	<0.001	<0.005
TF5475-2	GTU09-I	07-JAN-15	0.01	NA
	GTU09-E	07-JAN-15	0.0065	0.0068

^a A discharge limit of 0.050 ppm is set for total chromium during the dry season (April 1-November 30), and no limit is set for total chromium for the wet season (December 1-March 31); however, a limit of 0.022 ppm hexavalent chromium applies during the wet season. Discharge limits are defined in the Explanation of Significant Differences for metals discharge limits (April 1997).

Shaded values exceeded the discharge limit. See text for explanation.

Table A-5. Bioassay, turbidity, and chloride analyses of effluent samples by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Aquatic Bioassay^a Percent Survival	Turbidity Nephelometric Turbidity Units (NTU)	Chloride (mg/L)
TFA	TFA-E001	15-JAN-15	100 (100)	<0.1	84
TFB	TFB-E002	07-JAN-15	100 (100)	0.15	71
TFC	TFC-E003	05-JAN-15	100 (100)	<0.1	130
TFC-E	MTU1-E	15-JAN-15	100 (100)	0.12	280
TFC-SE	PTU1-E	12-JAN-15	100 (100)	0.13	76
TFD	TFD-E004	05-JAN-15	100 (100)	0.14	300
TFD-E	PTU8-E	07-JAN-15	100 (100)	0.13	320
TFD-HPD	PTU10-E	20-JAN-15	NA	<0.1	480
TFD-S	PTU2-E	08-JAN-15	100 (100)	0.13	82
TFD-SE	PTU11-E	07-JAN-15	100 (100)	0.21	180
TFD-SS	PTU12-E	13-JAN-15	100 (100)	0.13	180
TFD-W	PTU6-E	14-JAN-15	100 (100)	<0.1	210
TFE-E	PTU3-E	13-JAN-15	100 (100)	0.14	110
TFE-HS	GTU07-E	12-JAN-15	100 (100)	0.13	60
TFE-NW	PTU9-E	13-JAN-15	100 (100)	0.16	92
TFE-SE	MTU04-E	12-JAN-15	100 (100)	0.1	94
TFE-SW	MTU03-E	13-JAN-15	100 (100)	0.14	75
TFE-W	MTU05-E	13-JAN-15	100 (100)	0.15	59
TFG-1	GTU01-E	07-JAN-15	100 (100)	0.16	34
TFG-N	MTU02-E	14-JAN-15	100 (100)	<0.1	41
TF406	PTU5-E	14-JAN-15	100 (100)	<0.1	79
TF406-NW	GTU03-E	07-JAN-15	100 (100)	<0.1	54
TF5475-2	GTU09-E	07-JAN-15	100 (100)	0.11	110

^a Test species was Fathead minnow and the test duration was 96 hours.

Percent survival in the control group samples shown in parentheses.

Note: NA = not applicable

Table A-6. Metals analyses of effluent samples by treatment facility as compared to the instantaneous Maximum.

		Antimony	Arsenic	Beryllium	Cadmium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
		<-	-	-	-	-	mg/L (ppm)	-	-	-	-	-	->
Wet Season ^a (December 1 - March 31)		NA	0.01	NA	0.002	0.0236	0.006	0.002	0.3	0.01	0.1	NA	0.220
Sample Station	Date Sampled												
TFA													
TFA-E001	15-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFB													
TFB-E002	07-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFC													
TFC-E003	05-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFC-E													
MTU1-E	15-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFC-SE													
PTU1-E	12-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD													
TFD-E004	05-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD-E													
PTU8-E	07-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD-HPD													
PTU10-E	20-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	0.0056	<0.005	<0.001	<0.01
TFD-S													
PTU2-E	08-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD-SE													
PTU11-E	07-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD-SS													
PTU12-E	13-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD-W													
PTU6-E	14-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01

Table A-6. Metals analyses of effluent samples by treatment facility as compared to the instantaneous Maximum.

		Antimony	Arsenic	Beryllium	Cadmium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
		<-	-	-	-	-	mg/L (ppm)	-	-	-	-	-	->
Wet Season ^a (December 1 - March 31)		NA	0.01	NA	0.002	0.0236	0.006	0.002	0.3	0.01	0.1	NA	0.220
Sample Station	Date Sampled												
TFE-E													
PTU3-E	13-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFE-HS													
GTU07-E	12-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFE-NW													
PTU9-E	13-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	0.019
TFE-SE													
MTU04-E	12-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFE-SW													
MTU03-E	13-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFE-W													
MTU05-E	13-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFG-1													
GTU01-E	07-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFG-N													
MTU02-E	14-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TF406													
PTU5-E	14-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TF406-NW													
GTU03-E	07-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TF5475-2													
GTU09-E	07-JAN-15	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01

^a The Explanation of Significant Differences for metals discharge identifies the Instantaneous Maximum concentrations for the wet season (December 1 - March 30).

NA = not applicable

Numbers in **BOLD** print indicate positive values above the detection limit.

Shaded values exceeded the discharge limit. See text for explanation.

Table A-7. Radiological analyses of effluent and receiving waters by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Gross Alpha <-	Gross Beta pCi/L	Tritium ->
TFA	TFA-E001	15-JAN-15	<2	4.56	122
TFB	TFB-E002	07-JAN-15	<2	<3	<100
TFB	TFB-R002	07-JAN-15	<2	<3	<100
TFC	TFC-E003	05-JAN-15	<2	<3	<100
TFC	TFC-R003	05-JAN-15	2.59	3.44	<100
TFC-E	MTU1-E	15-JAN-15	<2	<3	232
TFC-SE	PTU1-E	12-JAN-15	<2	<3	204
TFD	TFD-E004	05-JAN-15	6.15	4.3	<100
TFD-E	PTU8-E	07-JAN-15	14.7	5.61	<100
TFD-HPD	PTU10-E	20-JAN-15	<2	<3	<100
TFD-S	PTU2-E	08-JAN-15	2.64	<3	244
TFD-SE	PTU11-E	07-JAN-15	3.01	<3	218
TFD-SS	PTU12-E	13-JAN-15	4.79	3.63	152
TFD-W	PTU6-E	14-JAN-15	4.57	3.83	NA
	PTU6-E	23-JAN-15	NA	NA	<100
TFE-E	PTU3-E	13-JAN-15	4.18	<3	<100
TFE-HS	GTU07-E	12-JAN-15	3.23	3.99	<100
TFE-NW	PTU9-E	13-JAN-15	5.84	3.15	102
TFE-SE	MTU04-E	12-JAN-15	<2	3.14	<100
TFE-SW	MTU03-E	13-JAN-15	2.82	<3	366
TFE-W	MTU05-E	13-JAN-15	3.47	6.01	<100
TFG-1	GTU01-E	07-JAN-15	3.86	<3	161
TFG-1	TFG-ASW	07-JAN-15	4.38	<3	<100
TFG-N	MTU02-E	14-JAN-15	<2	3.54	134
TF406	PTU5-E	14-JAN-15	2.16	<3	<100
TF406-NW	GTU03-E	07-JAN-15	10.1	<3	<100
TF5475-2	GTU09-E	07-JAN-15	<2	<3	418

Numbers in **BOLD** print indicate positive values above the detection limit.

Explanation of Abbreviations

TFA-I001 is a sampling port located immediately prior to the TFA Treatment System.

TFA-E001 is a sampling port located immediately after the TFA Treatment System, at the beginning of the discharge pipeline.

TFA receiving water is routinely sampled at the TFG-ASW location.

TFB-I002 is a sampling port located immediately prior to the TFB Treatment System.

TFB-E002 is a sampling port located immediately after the TFB Treatment System, at the beginning of the discharge pipeline.

TFB-R002 is a sampling station in the drainage ditch north of TFB, located approximately 75 ft downstream from the discharge point.

TFC-I003 is a sampling port located immediately prior to the TFC Treatment System.

TFC-E003 is a sampling port located immediately after the TFC Treatment System, at the beginning of the discharge pipeline.

TFC-R003 is a sampling station in Arroyo Las Positas, located approximately 75 ft downstream from the TFC discharge point.

TFD-I004 is a sampling port located immediately prior to the TFD Treatment System.

TFD-E004 is a sampling port located immediately after the TFD Treatment System, prior to discharge to the Lake Haussmann or to the underground discharge pipeline leading to Arroyo Las Positas.

TFD-R004 is now combined with and collected at the TFC-R003 location. Results are reported under TFC-R003, as approved by the RWQCB.

CRD1-I is a sampling port located immediately prior to the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1).

CRD1-E is the effluent from the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1) and then reinjected at W-1302.

CRD2-I is a sampling port located immediately prior to the catalytic columns in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2).

CRD2-E is the effluent from the last catalytic column in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2) and then reinjected at W-1610.

GTU01-I is a sampling port located immediately prior to GTU01, which is currently operating in the TFG-1 area.

GTU01-E is a sampling port located immediately after GTU01, which is currently operating in the TFG-1 area.

GTU01 receiving water is routinely sampled at the TFG-ASW location.

GTU03-I is a sampling port located immediately prior to GTU03, which is currently operating in the TF406 Northwest area.

GTU03-E is a sampling port located immediately after GTU03, which is currently operating in the TF406 Northwest area.

GTU03 receiving water is routinely sampled at the TFC-R003 location.

GTU07-I is a sampling port located immediately prior to GTU07, which is currently operating in the TFE Hotspot area.

GTU07-E is a sampling port located immediately after GTU07, which is currently operating in the TFE Hotspot area.

GTU07 receiving water is routinely sampled at the TFC-R003 location.

GTU09-I is a sampling port located immediately prior to GTU09, which is currently operating in the TF5475 area.

GTU09-E is a sampling port located immediately after GTU09, which is currently operating in the TF5475 area.

GTU09 receiving water is routinely sampled at the TFC-R003 location.

MTU02-I is a sampling port located immediately prior to MTU02, which is currently operating in the TFG North area.

MTU02-E is a sampling port located immediately after MTU02, which is currently operating in the TFG North area.

MTU02 receiving water is routinely sampled at the TFC-R003 location.

MTU03-I is a sampling port located immediately prior to MTU03, which is currently operating in the TFE Southwest area.

MTU03-E is a sampling port located immediately after MTU03, which is currently operating in the TFE Southwest area.

MTU03 receiving water is routinely sampled at the TFC-R003 location.

MTU04-I is a sampling port located immediately prior to MTU04, which is currently operating in the TFE Southeast area.

MTU04-E is a sampling port located immediately after MTU04, which is currently operating in the TFE Southeast area.

MTU04 receiving water is routinely sampled at the TFC-R003 location.

MTU05-I is a sampling port located immediately prior to MTU05, which is currently operating in the TFE West area.

MTU05-E is a sampling port located immediately after MTU05, which is currently operating in the TFE West area.

MTU05 receiving water is routinely sampled at the TFC-R003 location.

MTU1-I is a sampling port located immediately prior to MTU1, which is currently operating in the TFC East area.

MTU1-E is a sampling port located immediately after MTU1, which is currently operating in the TFC East area.

Explanation of Abbreviations

MTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU1-I is a sampling port located immediately prior to PTU-1, which is currently operating in the TFC Southeast area.

PTU1-E is a sampling port located immediately after PTU-1, which is currently operating in the TFC Southeast area.

PTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU2-I is a sampling port located immediately prior to PTU-2, which is currently operating in the TFD South area.

PTU2-E is a sampling port located immediately after PTU-2, which is currently operating in the TFD South area.

PTU2 receiving water is routinely sampled at TFC-R003 during the wet season.

PTU3-I is a sampling port located immediately prior to PTU-3, which is currently operating in the TFE East area.

PTU3-E is a sampling port located immediately after PTU-3, which is currently operating in the TFE East area.

PTU3 receiving water is routinely sampled at the TFC-R003 location.

PTU5-I is a sampling port located immediately prior to PTU-5, which is currently operating in the TF406 extraction location.

PTU5-E is a sampling port located immediately after PTU-5, which is currently operating in the TF406 extraction location.

PTU5 receiving water is routinely sampled at the TFC-R003 location.

PTU6-I is a sampling port located immediately prior to PTU-6, which is currently operating in the TFD West area.

PTU6-E is a sampling port located immediately after PTU-6, which is currently operating in the TFD West area.

PTU6 receiving water is routinely sampled at the TFC-R003 location.

PTU8-I is a sampling port located immediately prior to PTU-8, which is currently operating in the TFD East area.

PTU8-E is a sampling port located immediately after PTU-8, which is currently operating in the TFD East area.

PTU8 receiving water is routinely sampled at the TFC-R003 location.

PTU9-I is a sampling port located immediately prior to PTU-9, which is currently operating in the TFE Northwest area.

PTU9-E is a sampling port located immediately after PTU-9, which is currently operating in the TFE Northwest area.

PTU9 receiving water is routinely sampled at the TFC-R003 location.

PTU10-I is a sampling port located immediately prior to PTU-10, which is currently operating in the TFD Helipad area.

PTU10-E is a sampling port located immediately after PTU-10, which is currently operating in the TFD Helipad area.

PTU10 receiving water is routinely sampled at the TFC-R003 location.

PTU11-I is a sampling port located immediately prior to PTU-11, which is currently operating in the TFD Southeast area.

PTU11-E is a sampling port located immediately after PTU-11, which is currently operating in the TFD Southeast area.

PTU11 receiving water is routinely sampled at the TFC-R003 location.

PTU12-I is a sampling port located immediately prior to PTU-12, which is currently operating in the TFD Southshore area.

PTU12-E is a sampling port located immediately after PTU-12, which is currently operating in the TFD Southshore area.

PTU12 receiving water is routinely sampled at the TFC-R003 location.

STU06-I is a sampling port located immediately prior to STU06, which is operating in the TFA East area.

STU06-E is a sampling port located immediately after STU06, which is operating in the TFA East area.

STU06 receiving water is routinely sampled at the TFG-ASW location.

STU09-I is a sampling port located immediately prior to STU09, which is currently operating in the TF518-North area.

STU09-E is a sampling port located immediately after STU09, which is currently operating in the TF518-North area.

STU09 receiving water is routinely sampled at the TFC-R003 location.

Attachment B

Self-Monitoring Reports

Self-Monitoring Report LLNL Treatment Facility A (TFA) AREA TFA

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>31</u>																
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	10	11	12	13	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>		

Total monthly time facility operated (hours): 637

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-15-2015</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-109	976	0.0
W-262	282	0.0
W-404	1,213,444	32.4
W-408	810,992	12.3
W-415	1,484,912	40.1
W-457	286,608	8.3
W-518	149,506	4.0
W-522	461,352	12.5
W-605	325,956	8.7
W-614	435,944	12.0
W-712	178,380	5.1
W-714	261,104	6.9
W-1009	843,584	22.6
W-904	279,600	15.0
W-903	488,384	13.6
W-1001	47,260	1.2
W-1004	394,136	11.0
<hr/>		
Total:	<u>7,662,420</u>	<u>205.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>3,973,391</u>

Self-Monitoring Report (cont'd)
LLNL Treatment Facility A (TFA)
AREA TFA

Arroyo Seco

TFG-ASW

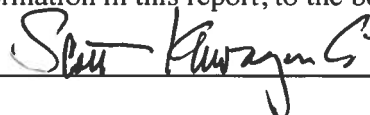
3,689,029

6. Comments:

Facility was shutdown on 01-09-2015 for Arroyo Seco maintenance. Facility was restarted on 01-14-2015. W-904, W-518, and W-522 remained secured. Started W-518 and W-522 on 1-16-15. Started W-904 on 1-28-15.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _____



Date: 02-02-2015

Self-Monitoring Report

LLNL Treatment Facility A (TFA)

AREA TFA

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>31</u>														
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>			

Total monthly time facility operated (hours): 661

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-04-2015</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-109	0	0.0
W-262	0	0.0
W-404	1,253,180	31.1
W-408	1,128,584	28.6
W-415	1,449,712	41.3
W-457	276,280	7.2
W-518	158,818	3.5
W-522	538,400	13.5
W-605	338,580	8.5
W-614	449,836	11.5
W-1001	51,230	1.3
W-1004	423,256	10.8
W-1009	843,024	21.4
W-712	197,268	5.0
W-714	273,164	7.0
W-903	509,728	12.3
W-904	625,472	17.9
Total:	<u>8,516,532</u>	<u>220.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>3,935,932</u>

Self-Monitoring Report (cont'd)
LLNL Treatment Facility A (TFA)
AREA TFA

Arroyo Seco

TFG-ASW

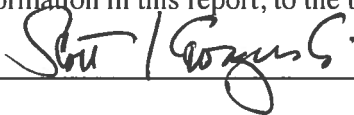
4,580,600

6. Comments:

Facility was shutdown on 02-08-2015. Facility was restarted on 02-09-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _____



Date: 03-04-2015

Self-Monitoring Report

LLNL Treatment Facility A (TFA)

AREA TFA

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February	<u>28</u>																
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>	

Total monthly time facility operated (hours): 774

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>03-03-2015</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18.7</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-109	0	0.0
W-262	0	0.0
W-404	1,478,248	31.4
W-408	1,316,952	28.8
W-415	1,749,488	38.3
W-457	330,864	6.9
W-605	401,852	8.8
W-518	186,002	3.9
W-522	642,736	13.6
W-614	526,140	11.6
W-1001	61,890	1.3
W-1004	493,536	10.8
W-1009	993,280	21.6
W-712	232,944	5.1
W-714	293,184	6.9
W-903	578,520	12.2
W-904	689,344	15.3
Total:	<u>9,974,980</u>	<u>216.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>5,277,576</u>

Self-Monitoring Report (cont'd)
LLNL Treatment Facility A (TFA)
AREA TFA

Arroyo Seco

TFG-ASW

4,697,404

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaguchi Date: 04-07-2015

Self-Monitoring Report
LLNL Solar Treatment Unit 06 (STU06)
AREA TFA-E

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December	30	31																											
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15														
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30														

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-254	0	0.0
<hr/>		
Total:	<u>0</u>	<u>0.0</u>

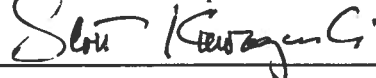
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>0</u>

6. Comments:

Well W-1214 removed from SMR. Temporary operating permit expired 12-17-14.
System secured on 12-16-14.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-11-2015**

Self-Monitoring Report
LLNL Solar Treatment Unit 06 (STU06)
AREA TFA-E

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-254	0	0.0
<hr/>		
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>0</u>

6. Comments:

Facility secured due to lack of water in extraction well.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-11-2015**

Self-Monitoring Report

LLNL Treatment Facility B (TFB)

AREA TFB

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>31</u>																								
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>										
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>										

Total monthly time facility operated (hours): **752**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-07-2015</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19.5</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	348,688	8.1
W-610	284,960	6.4
W-620	516	0.0
W-621	132	0.0
W-655	100	0.0
W-704	777,376	17.7
W-1423	147,528	3.5
W-2501	707,452	16.0
W-2502	205,056	4.9
Total:	<u>2,471,808</u>	<u>56.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>1,977,416</u>
<u>Building 133 Cooling Tower</u>	<u>TFB-E-B133CT</u>	<u>494,392</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd)
LLNL Treatment Facility B (TFB)
AREA TFB

Operator Signature: Steve Kawaguchi Date: 02-02-2015

**Land Observation Report date:
TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month January Year 2015

2. Date compliance sampling performed 01-07-2015

3. Weather Conditions:

Average air tempertaure (°C):	<u>6.98</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>3/ ESE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve / Cawson Date: 02-09-2015

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd)
LLNL Treatment Facility B (TFB)
AREA TFB

Operator Signature: Shirley C. Wagner Date: 03-04-2015

Land Observation Report date:
TFB-R002 - West Perimeter Drainage Channel

1. Reporting Period: Business Month February Year 2015

2. Date compliance sampling performed 02-02-2015

3. Weather Conditions:

Average air tempertaure (°C):	<u>11.91</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>2/ ESE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-09-2015

Self-Monitoring Report

LLNL Treatment Facility B (TFB)

AREA TFB

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February	<u>28</u>																
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>	

Total monthly time facility operated (hours): 779

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>03-02-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18.9</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	348,872	7.5
W-610	298,992	6.5
W-620	0	0.0
W-621	0	0.0
W-655	0	0.0
W-704	797,040	17.6
W-1423	142,684	3.2
W-2501	724,702	16.0
W-2502	272,535	4.2
Total:	<u>2,584,825</u>	<u>55.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>1,925,862</u>
<u>Building 133 Cooling Tower</u>	<u>TFB-E-B133CT</u>	<u>658,963</u>

6. Comments:

Facility was shutdown on 03-30-2015 due to low air flow fault. Facility was restarted on 03-31-2015.

Self-Monitoring Report (cont'd)
LLNL Treatment Facility B (TFB)
AREA TFB

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _____

Steve Kawaguchi

Date: 04-03-2015

**Land Observation Report date:
TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month March Year 2015

2. Date compliance sampling performed 03-02-2015

3. Weather Conditions:

Average air tempertaure (°C):	<u>10.45</u>
6-day total precipitation (in):	<u>0.06</u>
Average wind speed/direction (mph):	<u>4/ S</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-07-2015

**Self-Monitoring Report
LLNL Treatment Facility C (TFC)
AREA TFC**

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 751

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-05-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 19.6

4. Wellfield Data:

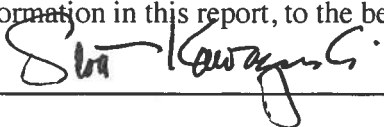
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	583,232	13.3
W-1015	0	0.0
W-1102	0	0.0
W-1103	0	0.0
W-1104	1,206,192	26.3
W-1116	3,849	2.5
Total:	<u>1,793,273</u>	<u>42.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,793,273</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-02-2015

**Land Observation Report date:
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month January Year 2015

2. Date compliance sampling performed 01-05-2015

3. Weather Conditions:

Average air tempertaure (°C):	<u>5.87</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>5/ ESE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Kawaguchi Date: 02-09-2015

**Self-Monitoring Report
LLNL Treatment Facility C (TFC)
AREA TFC**

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January 31
February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27

Total monthly time facility operated (hours): 681

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-02-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 19.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	530,128	13.2
W-1015	4	0.0
W-1102	6	0.0
W-1103	2	0.0
W-1104	1,090,480	27.1
W-1116	0	0.0
Total:	<u>1,620,620</u>	<u>40.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,620,620</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve K. [Signature] Date: 03-04-2015

**Land Observation Report date:
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month February Year 2015

2. Date compliance sampling performed 02-02-2015

3. Weather Conditions:

Average air tempertaure (°C):	<u>11.91</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>2/ ESE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Shirley Kawaguchi Date: 03-09-2015

**Self-Monitoring Report
LLNL Treatment Facility C (TFC)
AREA TFC**

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 779

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-02-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 20.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	604,920	13.1
W-1015	0	0.0
W-1102	0	0.0
W-1103	0	0.0
W-1104	1,233,168	26.7
W-1116	0	0.0
Total:	<u>1,838,088</u>	<u>39.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,838,088</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-01-2015

**Land Observation Report date:
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month March Year 2015

2. Date compliance sampling performed 03-02-2015

3. Weather Conditions:

Average air tempertaure (°C):	<u>10.45</u>
6-day total precipitation (in):	<u>0.06</u>
Average wind speed/direction (mph):	<u>4/ S</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-07-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 1 (MTU1)
AREA TFC-E

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): 346

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-15-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 20

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-368	23,573	1.5
W-413	333,801	18.4
Total:	<u>357,374</u>	<u>19.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>357,374</u>

6. Comments:

The facility was down for several days because the pump in W-413 had to be replaced, and a SOP 3.2 had to be performed. Facility was restarted at 09:37 on 01-15-2015. Facility was shutdown at 11:04 on 01-22-2015 in order to change the water pressure switch setting. Facility was restarted at 15:31 on 01-22-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-17-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 1 (MTU1)
AREA TFC-E

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>30</u>	<u>31</u>													
February	<u>01</u>	<u>02</u>	03	04	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>			

Total monthly time facility operated (hours): 608

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-11-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20.7</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-368	44,465	1.2
W-413	592,212	16.2
Total:	<u>636,677</u>	<u>17.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>636,677</u>

6. Comments:

Facility shutdown at 12:31 on 02-02-2015 due to Discharge YS-JG broken. Facility was restarted at 15:42 on 02-05-2015. There was no flow at W-368 since 22:30 on 2-8-15 due lack of water. W-368 was restarted at 14:34 on 2-9-15 after changes were made to the LTL-setpoint. Facility was shutdown at 10:30 on 02-25-2015 to replace the resin columns. Facility was restarted at 13:00 on 02-25-2015. Facility was shutdown at 13:24 on 02-27-2015 in preparation for the EWFSU Test.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty Kild Date: 03-19-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 1 (MTU1)
AREA TFC-E

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 705

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-09-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 21.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-368	105,962	4.4
W-413	661,182	16.0
Total:	<u>767,144</u>	<u>20.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>767,144</u>

6. Comments:

Facility was restarted at 13:30 on 03-02-2015 to begin the EWFSU test. W-368 did not operate for a couple of days in accordance with the test plan. W-368 did not operate for approximately seven days because the level transmitter had to be replaced and SOP3.2 had to be performed. The facility was down for approximately 61 hrs.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kulin Date: 04-22-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 1 (PTU1)
AREA TFC-SE

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>31</u>														
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 755

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-12-2015</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>16.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	88,952	2.0
W-2201	0	0.0
Total:	<u>88,952</u>	<u>2.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>88,952</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Shou Kawaguchi Date: 02-02-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 1 (PTU1)
AREA TFC-SE

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January 31
February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27

Total monthly time facility operated (hours): 680

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-02-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 16.1

4. Wellfield Data:

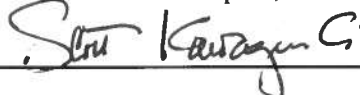
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	80,478	2.0
W-2201	0	0.0
Total:	<u>80,478</u>	<u>2.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>80,478</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-04-2015

Operator Signature: Scott Newagers Date: 04-01-2015

Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>31</u>														
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 751

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-05-2015</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20.3</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-351	53,953	1.2
W-653	3,136	3.0
W-906	19	0.0
W-907-2	0	0.0
W-2011	6,557	3.0
W-2101	8,199	3.0
W-2102	18,740	3.0
W-1206	535,804	12.8
W-1208	0	0.0
 Total:	<u>626,408</u>	<u>26.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>626,408</u>
<u>TFD irrigation supply</u>	<u>TFD-IRR</u>	<u>0</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd)
LLNL Treatment Facility D (TFD)
AREA TFD

Operator Signature: Scott Kawaguchi Date: 02-02-2015

Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>31</u>														
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	07	08	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>			

Total monthly time facility operated (hours): 601

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-04-2015</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-351	40,463	1.1
W-653	2,686	3.0
W-906	17	0.0
W-907-2	0	0.0
W-2011	5,166	3.0
W-2101	6,603	3.0
W-2102	14,210	3.0
W-1206	456,157	12.9
W-1208	216,533	20.0
<hr/>		
Total:	<u>741,835</u>	<u>46.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>741,835</u>
<u>TFD irrigation supply</u>	<u>TFD-IRR</u>	<u>0</u>

6. Comments:

Facility was shutdown on 02-06-2015 for planned power outage. Facility was restarted on 02-09-2015. Started W-1208 on 2-20-15.

Self-Monitoring Report (cont'd)
LLNL Treatment Facility D (TFD)
AREA TFD

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-04-2015

Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February	<u>28</u>																	
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>			
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>		

Total monthly time facility operated (hours): 771

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **03-03-2015**
Influent pH: **7.5**
Effluent pH: **7.5**
Effluent Temperature (°C): **20.5**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-351	53,065	1.1
W-653	2,937	3.0
W-906	0	0.0
W-907-2	0	0.0
W-2011	6,054	3.0
W-2101	7,728	3.0
W-2102	13,677	3.0
W-1206	587,371	12.9
W-1208	991,164	22.0
Total:	1,661,996	48.0

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,661,996</u>
<u>TFD irrigation supply</u>	<u>TFD-IRR</u>	<u>0</u>

6. Comments:

GAC canisters leaking. Replaced with new units on 3-17-15.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd)
LLNL Treatment Facility D (TFD)
AREA TFD

Operator Signature: Steve Kawaguchi Date: 04-07-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 8 (PTU8)
AREA TFD-E

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 738

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-07-2015
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 19.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2006	686	0.0
W-1301	28,034	0.7
W-1303	58,314	1.3
W-1306	6,110	0.0
W-1307	242,738	5.7
W-1550	8,608	0.2
W-2203	6,210	0.0
Total:	<u>350,700</u>	<u>7.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>350,700</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaguchi Date: 02-02-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 8 (PTU8)
AREA TFD-E

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January 31
February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27

Total monthly time facility operated (hours): 672

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-04-2015
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 18.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(gal)</u>	<u>Instantaneous</u> <u>Flow Rate(gpm)</u>
W-2006	656	0.0
W-1301	26,685	0.7
W-1303	53,661	1.4
W-1306	5,304	0.0
W-1307	228,822	5.5
W-1550	7,462	0.2
W-2203	4,974	0.0
Total:	<u>327,564</u>	<u>7.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving</u> <u>Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>327,564</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Keweenaw G. Date: 03-04-2015

Self-Monitoring Report

LLNL Portable Treatment Unit 8 (PTU8)

AREA TFD-E

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February	<u>28</u>																							
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>									
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	29	<u>30</u>	<u>31</u>								

Total monthly time facility operated (hours): 714

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>03-03-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20.7</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2006	634	0.0
W-1301	26,042	0.5
W-1303	46,398	1.1
W-1306	4,336	0.0
W-1307	232,958	5.5
W-1550	7,253	0.2
W-2203	4,317	2.0
Total:	<u>321,938</u>	<u>9.3</u>

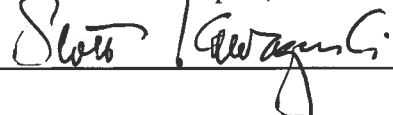
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>321,938</u>

6. Comments:

Facility was shutdown on 03-26-2015. Facility was restarted on 03-27-2015.
Facility was shutdown on 03-28-2015. Facility was restarted on 03-30-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-03-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 10 (PTU10)
AREA TFD-HPD

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>31</u>														
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	

Total monthly time facility operated (hours): 724

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-20-2015</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	169,799	3.8
Total:	<u>169,799</u>	<u>3.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>169,799</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty R. R. R. Date: 02-17-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 10 (PTU10)
AREA TFD-HPD

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>30</u>	<u>31</u>														
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>				

Total monthly time facility operated (hours): 708

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-05-2015</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	179,972	4.0
Total:	<u>179,972</u>	<u>4.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>179,972</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kula Date: 03-19-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 10 (PTU10)
AREA TFD-HPD

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 777

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-03-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 20.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	186,877	4.2
Total:	<u>186,877</u>	<u>4.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>186,877</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy K. Kilk Date: 04-20-2015

**Self-Monitoring Report
LLNL ISB01 (ISB01)
AREA TFD-HPD**

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 73

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1650	101	1.9
W-1653	79	1.3
W-1655	1	0.1
W-1657	0	0.0
Total:	<u>181</u>	<u>3.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>ISB01 injection well</u>	<u>W-1552</u>	<u>181</u>

6. Comments:

The facility shut down at 02:38 on 1-2-15 due to PSH interlock activation. The facility was restarted at 14:10 on 1-2-15. The facility shut down at 01:57 on 1-3-15 due to problems with the check valve in W-1552. The facility was restarted at 07:50 on 1-5-15. The facility shut down at 08:29 on 1-6-15 due to problems with the check valve in W-1552. The facility was down for several weeks to complete repair work at the facility. This work included replacement of the camlock fittings at the wellheads, a retro fitting of the well control boxes at the wellheads, and replacement of the check valve in W-1552. The facility was run for a very short time on the 30th(approximately 20 minutes) for testing and verification procedures, and therefore the data was excluded. Compliance sampling

Self-Monitoring Report (cont'd)
LLNL ISB01 (ISB01)
AREA TFD-HPD

is not required at this facility due to the fact that ISB01 is a closed loop system, and water is not discharged to the environment. Water was circulated through the system but was not treated.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty L. L. L. Date: 03-06-2015

**Self-Monitoring Report
LLNL ISB01 (ISB01)
AREA TFD-HPD**

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January	31														
February	01	02	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>			

Total monthly time facility operated (hours): 567

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1650	484	2.5
W-1653	537	1.3
W-1655	12	0.7
W-1657	0	0.0
Total:	<u>1,033</u>	<u>4.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>ISB01 injection well</u>	<u>W-1552</u>	<u>1,033</u>

6. Comments:

Compliance sampling is not required at this facility due to the fact that ISB01 is a closed loop system, and water is not discharged to the environment. Water was circulated through the system but was not treated. The facility was shut down at 10:20 on 1-30-15 until maintenance work at wellheads could be performed. The facility was restarted at 13:40 on 2-3-15. The facility was shut down at 14:37 on 2-3-15 after testing facility for leaks. The facility was restarted at 9:57 on 2-4-15.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kula Date: 03-19-2015

**Self-Monitoring Report
LLNL ISB01 (ISB01)
AREA TFD-HPD**

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 599

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1650	502	2.9
W-1653	454	0.5
W-1655	0	0.0
W-1657	0	0.0
Total:	<u>956</u>	<u>3.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>ISB01 injection well</u>	<u>W-1552</u>	<u>956</u>

6. Comments:

Compliance sampling is not required at this facility due to the fact that ISB01 is a closed loop system, and water is not discharged to the environment. Water was circulated through the system but was not treated. A total of approximately 131.58 gals of facility water were diverted to the pre-mixing tote on 3/6 and 3/27. The facility was down for approximately 169 hrs. for a variety of reasons: An unexplained loss of power to the controller, an interlock shutdown activation. There were also facility shutdowns due to preparations for sampling, premixing tote fill-ups, and ethyl lactate injection. The sensors and PVC pipe holes at the flow meters at W-1650 and W-1653 had to be cleaned. The contaminated sensors may have contributed to errors in the flow meter readings which resulted in a

LLNL ISB01 (ISB01)
AREA TFD-HPD

higher than normal volume percentage difference.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuhl Date: 04-22-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 2 (PTU2)
AREA TFD-S

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 738

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-08-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 21.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1503	414,090	9.3
W-1504	305,437	6.9
W-1510	119,473	3.0
W-2601	198,094	4.6
Total:	<u>1,037,094</u>	<u>23.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,037,094</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-03-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 2 (PTU2)
AREA TFD-S

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January 31
February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27

Total monthly time facility operated (hours): 672

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-18-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 21.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(gal)</u>	<u>Instantaneous</u> <u>Flow Rate(gpm)</u>
W-1503	394,571	10.1
W-1504	278,722	6.9
W-1510	115,047	2.8
W-2601	236,624	6.0
Total:	<u>1,024,964</u>	<u>25.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving</u> <u>Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,024,964</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-04-2015

Operator Signature: [Signature] Date: **04-01-2015**

Self-Monitoring Report
LLNL Portable Treatment Unit 11 (PTU11)
AREA TFD-SE

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 717

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-07-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 20

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	187,555	4.4
W-2005	23,803	0.5
W-1308	51,620	1.2
W-1403	36,080	1.0
W-1904	0	0.0
SIP-ETC-201	0	0.0
Total:	<u>299,058</u>	<u>7.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>299,058</u>

6. Comments:

Facility was shutdown on 01-09-2015 at 10:06 to update controller setting.
Facility was restarted on 01-09-2015 at 13:15.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-03-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 11 (PTU11)
AREA TFD-SE

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>30</u>	<u>31</u>													
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>				

Total monthly time facility operated (hours): 672

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-02-2015</u>
Influent pH:	<u>8.0</u>
Effluent pH:	<u>8.0</u>
Effluent Temperature (°C):	<u>20.6</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	192,844	4.6
W-2005	26,752	0.6
W-1308	52,186	1.3
W-1403	10,886	0.0
W-1904	0	0.0
SIP-ETC-201	0	0.0
Total:	<u>282,668</u>	<u>6.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>282,667</u>

6. Comments:

W-1403 restarted 2-20-15 at 10:30.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 03-02-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 11 (PTU11)
AREA TFD-SE

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February 27 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 789

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-02-2015
Influent pH: 8.0
Effluent pH: 8.0
Effluent Temperature (°C): 19.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	217,273	5.6
W-2005	35,083	0.7
W-1308	49,060	1.2
W-1403	44,958	1.1
W-1904	0	0.0
SIP-ETC-201	0	0.0
Total:	<u>346,374</u>	<u>8.5</u>

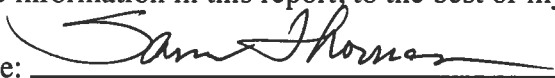
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>346,374</u>

6. Comments:

Facility was shutdown on 02-27-2015 at 11:15 to connect Belsperse control box to FCS. Facility was restarted at 14:33 02-27-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-13-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 12 (PTU12)
AREA TFD-SS

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 709

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-13-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 20.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(gal)</u>	<u>Instantaneous</u> <u>Flow Rate(gpm)</u>
W-1523	206,798	4.9
W-1601	33,745	0.9
W-1602	95,644	2.7
W-1603	593,892	13.9
Total:	<u>930,079</u>	<u>22.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving</u> <u>Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>930,079</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-03-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 12 (PTU12)
AREA TFD-SS

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January 31
February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27

Total monthly time facility operated (hours): 672

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-18-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 20.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	195,436	4.8
W-1601	33,768	0.9
W-1602	100,991	2.7
W-1603	531,047	13.9
Total:	<u>861,242</u>	<u>22.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>861,242</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-04-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 12 (PTU12)
AREA TFD-SS

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 767

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-10-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 20.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	219,902	4.7
W-1601	37,097	0.8
W-1602	100,350	2.3
W-1603	479,544	10.4
Total:	<u>836,893</u>	<u>18.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>836,893</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Paul Coe Date: 04-01-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 6 (PTU6)
AREA TFD-W

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 520

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-14-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 19.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1215	311,997	10.2
W-1216	306,731	10.1
W-1902	389,559	15.1
Total:	<u>1,008,287</u>	<u>35.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,008,287</u>

6. Comments:

Facility shutdown at 15:26 on 12-31-2014 due to "SNAP I/O" alarm. Facility was restarted at 10:34 on 01-02-2015. W-1902 shut down at 23:53 on 01-2-15 due to low flow. W-1902 was restarted at 16:57 on 01-2-15. Facility was shutdown at 11:36 on 01-07-2015 to repair leak at discharge pump line. Facility was restarted at 13:25 on 01-09-2015. Facility shut down at 15:45 on 01-17-2015 due to "SNAP I/O" alarm. Facility was restarted at 08:31 on 01-23-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy K. Kline Date: 03-03-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 6 (PTU6)
AREA TFD-W

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January 31
February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27

Total monthly time facility operated (hours): 676

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-05-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 18.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1215	402,367	10.0
W-1216	406,244	10.1
W-1902	602,503	15.2
Total:	<u>1,411,114</u>	<u>35.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,411,114</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty Kuhn Date: 04-03-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 6 (PTU6)
AREA TFD-W

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 780

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-06-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 18.8

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1215	465,027	10.1
W-1216	467,210	10.0
W-1902	700,844	15.3
Total:	<u>1,633,081</u>	<u>35.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,633,081</u>

6. Comments:

Facility was shutdown at 15:42 on 03-31-2015 to repair a leak on the outlet side of the discharge pump. The facility was down for approximately 7.75 hrs.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Bill G. Kuhn Date: 04-20-2015

Self-Monitoring Report

LLNL Vapor Extraction System 11 (VES11)

AREA VTFD-ETCS

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treatment facility operated

December	<u>31</u>														
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1904	0	0.0	0	0	0
W-ETC-2003	552,238	12.2	-.07	60	726
W-ETC-2004A	274,933	6.3	-5.2	60	726
W-ETC-2004B	1,055,613	25.0	-4.92	60	726
SIP-ETC-201	0	0.0	0	0	0
Total:	<u>1,882,784</u>	<u>43.5</u>			

4. Comments:

End month volumes for extraction wells were calculated from individual flow measurements, and not derived from facility totalizer values. Flow from W-ETC-2004B calculated at an assumed rate of 25 scfm from 12/25/14 to 1/9/15 due to faulty differential pressure transducer. Facility hours of operation for reporting month have been amended due to malfunction of facility clock. Facility shutdown for <3 minutes several times during reporting month to remove water from facility knockout.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-12-2015

Self-Monitoring Report
LLNL Vapor Extraction System 11 (VES11)
AREA VTFD-ETCS

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treatment facility operated

January	<u>30</u>	<u>31</u>													
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>				


3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1904	0	0.0	0	0	0
W-ETC-2003	498,283	12.8	-.86	60	679
W-ETC-2004A	249,421	6.2	-5.34	60	679
W-ETC-2004B	998,704	24.4	-5.05	60	679
SIP-ETC-201	0	0.0	0	0	0
Total:	<u>1,746,408</u>	<u>43.4</u>			

4. Comments:

Facility was shutdown for <3 minutes several times during reporting month to facilitate the removal of condensate from separator.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-03-2015

Self-Monitoring Report

LLNL Vapor Extraction System 11 (VES11)

AREA VTFD-ETCS

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treatment facility operated

February	<u>27</u>	<u>28</u>																													
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1904	7	0.0	0	0	0
W-ETC-2003	588,632	10.5	-.71	68	809
W-ETC-2004A	248,364	4.2	-3.79	68	809
W-ETC-2004B	991,426	18.3	-3.51	68	809
SIP-ETC-201	70	0.0	0	0	0
Total:	<u>1,828,499</u>	<u>33.1</u>			

4. Comments:

System vacuum adjusted 3-30-15 to -19 In Hg to curtail the loss of operating liquid due to warm ambient temperatures. Facility was shutdown for <2 minutes on several occasions during reporting month to remove water from condensate knockout.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-07-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 3 (PTU3)
AREA TFE-E

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 30 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 753

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-13-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 20.5

4. Wellfield Data:

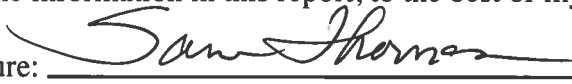
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	351,135	7.9
W-1109	63,777	1.4
W-1903	9,453	0.2
W-1909	0	0.0
W-2305	0	0.0
Total:	<u>424,365</u>	<u>9.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>424,365</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-09-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 3 (PTU3)
AREA TFE-E

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>30</u>	<u>31</u>													
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>				

Total monthly time facility operated (hours): 682

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-02-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>19.7</u>

4. Wellfield Data:

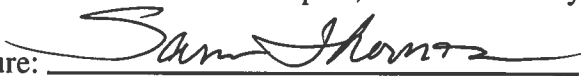
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	318,471	7.8
W-1109	54,926	1.4
W-1903	8,898	0.2
W-1909	0	0.0
W-2305	0	0.0
Total:	<u>382,295</u>	<u>9.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>382,295</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-03-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 3 (PTU3)
AREA TFE-E

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February 27 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 802

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-02-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 20.3

4. Wellfield Data:

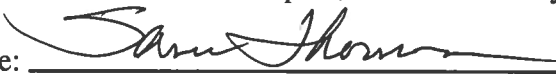
<u>Source</u>	<u>Monthly</u> <u>Volume(gal)</u>	<u>Instantaneous</u> <u>Flow Rate(gpm)</u>
W-566	370,511	8.0
W-1109	61,263	1.4
W-1903	8,264	0.2
W-1909	0	0.0
W-2305	0	0.0
Total:	<u>440,038</u>	<u>9.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving</u> <u>Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>440,038</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-13-2015

Self-Monitoring Report
LLNL GAC Treatment Unit 07 (GTU07)
AREA TFE-HS

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 650

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-12-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 19.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2105	582	0.3
W-2801	40,324	1.2
Total:	<u>40,906</u>	<u>1.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>40,906</u>

6. Comments:

W-2105 secured 1-7-15 at 07:15 and restarted 1-12-15 at 10:55. GTU 07 secured 1-23-15 at 10:08 to allow EE group to investigate problem with the contactor and VFD at W-2105. Facility was restarted 1-26-15 at 11:36.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 02-03-2015

Self-Monitoring Report
LLNL GAC Treatment Unit 07 (GTU07)
AREA TFE-HS

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>30</u>	<u>31</u>													
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>				

Total monthly time facility operated (hours): 678

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-02-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>21.3</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2105	823	0.4
W-2801	42,208	1.1
Total:	<u>43,031</u>	<u>1.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>43,031</u>

6. Comments:

Facility shutdown 2-24-15 at 07:40 due to low flow interlock. Facility was restarted at 08:05.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-12-2015

Self-Monitoring Report
LLNL GAC Treatment Unit 07 (GTU07)
AREA TFE-HS

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February 27 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 785

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-04-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 18.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2105	839	0.3
W-2801	46,464	0.9
Total:	<u>47,303</u>	<u>1.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>47,303</u>

6. Comments:

Facility shutdown 3-12-15 at 02:02 due to facility low flow interlock. Facility was restarted 3-12-15 at 15:17.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 04-13-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 9 (PTU9)
AREA TFE-NW

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 757

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-13-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 21.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	287,564	7.2
W-1409	93,133	2.1
Total:	<u>380,697</u>	<u>9.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>380,697</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-03-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 9 (PTU9)
AREA TFE-NW

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>31</u>														
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>			

Total monthly time facility operated (hours): 679

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-11-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>21.8</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	284,213	7.1
W-1409	81,221	2.0
Total:	<u>365,434</u>	<u>9.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>365,434</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-04-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 9 (PTU9)
AREA TFE-NW

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 779

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-10-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 22.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	312,232	6.8
W-1409	80,401	1.7
Total:	<u>392,633</u>	<u>8.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>392,633</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-01-2015**

Self-Monitoring Report
LLNL Mini Treatment Unit 04 (MTU04)
AREA TFE-SE

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 719

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-12-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 21

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-359	365,948	8.4
Total:	<u>365,948</u>	<u>8.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>365,948</u>

6. Comments:

Facility was shutdown on 01-21-2015 at 13:40 to replace diaphragm on back flow regulator. Facility was restarted on 01-21-2015 at 14:23.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 02-03-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 04 (MTU04)
AREA TFE-SE

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>30</u>	<u>31</u>														
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>					

Total monthly time facility operated (hours): 666

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-02-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>20.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-359	339,084	8.4
Total:	<u>339,084</u>	<u>8.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>339,084</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 03-03-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 04 (MTU04)
AREA TFE-SE

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February	<u>27</u>	<u>28</u>																													
March	01	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															

Total monthly time facility operated (hours): 727

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>03-02-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>19.8</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-359	371,419	8.5
Total:	<u>371,419</u>	<u>8.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>371,419</u>

6. Comments:

Facility shutdown on 02-28-2015 at 13:03 hrs due to facility low flow alarm.
Facility was restarted on 03-02-2015 at 07:44.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thom Date: 04-13-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 03 (MTU03)
AREA TFE-SW

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 718

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-13-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 19.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1516	449,243	10.4
W-1518	1,672	0.1
W-1520	34,414	0.8
W-1522	42,335	0.9
Total:	<u>527,664</u>	<u>12.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>527,664</u>

6. Comments:

At 16:30 on 1-15-15 W-1518 was shut down and secured due to a very low flow rate available at the wellhead.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-13-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 03 (MTU03)
AREA TFE-SW

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>30</u>	<u>31</u>													
February	<u>01</u>	<u>02</u>	<u>03</u>	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

Total monthly time facility operated (hours): 83

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1516	52,455	10.6
W-1518	0	0.0
W-1520	3,984	0.8
W-1522	4,959	1.0
Total:	<u>61,398</u>	<u>12.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>61,398</u>

6. Comments:

Facility shutdown at 06:08 on 02-02-2015 due to stripper-1 PSH interlock activation. Facility was restarted at 10:33 on 02-03-2015. Facility was shutdown at 15:31 on 02-03-2015 due to a carbon breakthrough of the GAC's.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuhl Date: 03-20-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 03 (MTU03)
AREA TFE-SW

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 658

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-05-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 20.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1516	409,517	10.3
W-1518	0	0.0
W-1520	32,724	0.9
W-1522	42,314	1.2
Total:	<u>484,555</u>	<u>12.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>484,555</u>

6. Comments:

Facility was restarted at 10:34 on 03-04-2015 after the GAC's were replaced and electrical maintenance was performed. Software upgrades were installed at this time. Facility was shutdown at 11:18 on 03-04-2015. Facility was restarted at 14:02 on 03-04-2015. The facility was down for approximately 108.5 hrs.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy K. Kula Date: 04-29-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 05 (MTU05)
AREA TFE-W

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 717

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-13-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 20.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-292	261,143	6.1
W-305	559,736	14.0
Total:	<u>820,879</u>	<u>20.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>820,879</u>

6. Comments:

Facility was shut down at 11:20 on 01-09-2015 to make changes to the controller configuration. Facility was restarted at 14:05 on 01-09-2015. W-305 shut down at 10:15 on 1-27-15 due to low flow. W-305 was restarted at 11:20 on 1-27-15.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: B. G. L. L. L. Date: 02-13-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 05 (MTU05)
AREA TFE-W

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>30</u>	<u>31</u>													
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>			

Total monthly time facility operated (hours): 696

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-05-2015</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19.9</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-292	253,645	6.0
W-305	504,675	12.1
Total:	<u>758,320</u>	<u>18.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>758,320</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kild Date: 03-19-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 05 (MTU05)
AREA TFE-W

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 742

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-03-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 20.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-292	269,925	6.1
W-305	537,301	12.1
Total:	<u>807,226</u>	<u>18.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>807,226</u>

6. Comments:

Facility was shutdown at 10:29 on 03-17-2015 to repair a leak. Facility was restarted at 11:31 on 03-18-2015. The facility was down for approximately 25 hrs.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kite Date: 04-20-2015

Self-Monitoring Report

LLNL Vapor Extraction System 16 (VES16)

AREA VTFE-ELM

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treatment facility operated

December 31
 January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29

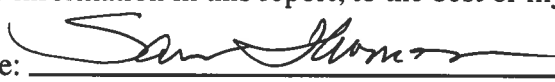
3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1903	33,486	1.2	-19.38	72	635
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-003	180,582	4.1	-1	72	635
W-543-1908	0	0.0	0	0	0
Total:	<u>214,068</u>	<u>5.3</u>			

4. Comments:

Facility was shutdown on 01-04-2015 at 04:57 attributed to condensate collection tank high level. Facility was restarted on 01-07-2015 at 15:35.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-05-2015

Self-Monitoring Report

LLNL Vapor Extraction System 16 (VES16)

AREA VTFE-ELM

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treatment facility operated

January	<u>30</u>	<u>31</u>														
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>					


3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1903	77,343	0.7	-18.53	72	666
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-003	149,664	4.6	-1	72	666
W-543-1908	0	0.0	0	0	0
Total:					
	<u>227,007</u>	<u>5.3</u>			

4. Comments:

Facility was shutdown on 02-04-2015 at 08:46 for software upgrade. Facility was restarted on 02-04-2015 at 16:10.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-12-2015

Self-Monitoring Report

LLNL Vapor Extraction System 16 (VES16)

AREA VTFE-ELM

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treatment facility operated

February	<u>27</u>	<u>28</u>																													
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																
	<u>16</u>	<u>17</u>	18	19	20	21	22	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															

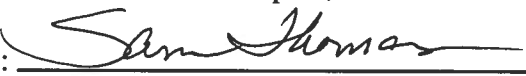
3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1903	107,213	3.5	-22.35	70	606
W-1909	44	0.0	0	0	0
W-2305	10	0.0	0	0	0
W-543-001	20	0.0	0	0	0
W-543-003	104,668	2.1	-.3	70	606
W-543-1908	10	0.0	0	0	0
Total:	<u>211,965</u>	<u>5.5</u>			

4. Comments:

Facility was shutdown on 03-03-2015 at 06:41 attributed to snap I/O fault at W-2305. Facility was restarted on 03-04-2015 at 14:20. Facility was shutdown on 03-17-2015 at 14:30 due to failure of facility Differential Pressure transducer. Facility was restarted on 03-23-2015 at 13:40. Quarterly vapor samples collected from operating and idle extraction wells 3-17-14.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-13-2015

Self-Monitoring Report
LLNL Vapor Extraction System 12 (VES12)
AREA VTFE-HS

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treatment facility operated

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2105	59,394	1.4	-15.7	58	726
W-ETS-2008A	0	0.0	0	0	0
W-ETS-2008B	760,384	17.5	-14.98	58	726
W-ETS-2009	0	0.0	0	0	0
W-ETS-2010A	0	0.0	0	0	0
W-ETS-2010B	0	0.0	0	0	0
Total:	<u>819,778</u>	<u>18.9</u>			

4. Comments:

Facility shutdown several times during reporting month for <3 minutes to remove water from condensate knockout. Facility operating hours entered on this report taken from TFRT data due to malfunction of facility clock.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 02-05-2015

Self-Monitoring Report

LLNL Vapor Extraction System 12 (VES12)

AREA VTFE-HS

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treatment facility operated

January	<u>30</u>	<u>31</u>														
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>					


3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2105	58,520	1.5	-14.94	72	670
W-ETS-2008A	15	0.0	0	0	0
W-ETS-2008B	696,480	18.0	-14.1	72	670
W-ETS-2009	33	0.0	0	0	0
W-ETS-2010A	9	0.0	0	0	0
W-ETS-2010B	13	0.0	0	0	0
Total:					
	<u>755,070</u>	<u>19.5</u>			

4. Comments:

Facility was shutdown for <3 minutes several times during reporting month to facilitate removal of condensate from separator. Quarterly vapor samples collected from operating and idle extraction wells 2-11-15.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-12-2015

Self-Monitoring Report

LLNL Vapor Extraction System 12 (VES12)

AREA VTFE-HS

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treatment facility operated

February	<u>27</u>	<u>28</u>																								
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	09	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>											
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>										


3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2105	67,513	1.5	-15.37	58	766
W-ETS-2008A	0	0.0	0	0	0
W-ETS-2008B	859,238	18.0	-14.63	58	766
W-ETS-2009	0	0.0	0	0	0
W-ETS-2010A	0	0.0	0	0	0
W-ETS-2010B	0	0.0	0	0	0
Total:	<u>926,751</u>	<u>19.5</u>			

4. Comments:

Facility shutdown 03-08-2015 at 20:46 due to high condensate tank level.
Facility was restarted on 03-10-2015 at 08:50.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-13-2015

Self-Monitoring Report
LLNL GAC Treatment Unit 01 (GTU01)
AREA TFG-1

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 732

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-07-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 19.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	143,063	3.2
Total:	<u>143,063</u>	<u>3.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>143,063</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-03-2015

**Land Observation Report date:
TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month January Year 2015

2. Date compliance sampling performed 01-07-2015

3. Weather Conditions:

Average air tempertaure (°C):	<u>6.98</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>3/ ESE</u>

4. Receiving Data:

Sample Location	pH	Temperature (C)
<u>Receiving Water</u>	<u>6.5</u>	<u>20.7</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-04-2015

Self-Monitoring Report
LLNL GAC Treatment Unit 01 (GTU01)
AREA TFG-1

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>31</u>																
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>					

Total monthly time facility operated (hours): 672

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-10-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>19.6</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	130,992	3.2
Total:	<u>130,992</u>	<u>3.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>130,992</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-04-2015

**Land Observation Report date:
TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month February Year 2015

2. Date compliance sampling performed 02-10-2015

3. Weather Conditions:

Average air tempertaure (°C):	<u>13.6</u>
6-day total precipitation (in):	<u>1.27</u>
Average wind speed/direction (mph):	<u>5/ S</u>

4. Receiving Data:

Sample Location	pH	Temperature (C)
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-17-2015

Self-Monitoring Report
LLNL GAC Treatment Unit 01 (GTU01)
AREA TFG-1

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February	<u>28</u>																								
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>										
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	28	29	<u>30</u>	<u>31</u>									

Total monthly time facility operated (hours): 668

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>03-10-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>19.9</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	129,709	3.3
Total:	<u>129,709</u>	<u>3.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>129,709</u>

6. Comments:

System secure from 3/27/15 to 3/30/15 for carbon change.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _____

Date: 04-01-2015

**Land Observation Report date:
TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month March Year 2015

2. Date compliance sampling performed 03-10-2015

3. Weather Conditions:

Average air tempertaure (°C):	<u>12.52</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>2/ SE</u>

4. Receiving Data:

Sample <u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-29-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 02 (MTU02)
AREA TFG-N

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 753

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-14-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 21.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1806	23,832	0.5
W-1807	168,326	3.8
Total:	<u>192,158</u>	<u>4.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>192,158</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-03-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 02 (MTU02)
AREA TFG-N

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January 31
February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27

Total monthly time facility operated (hours): 659

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-10-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 21.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1806	21,570	0.5
W-1807	146,966	3.8
Total:	<u>168,536</u>	<u>4.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>168,536</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-04-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 02 (MTU02)
AREA TFG-N

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 666

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-10-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 21.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1806	22,393	0.6
W-1807	150,320	4.0
Total:	<u>172,713</u>	<u>4.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>172,713</u>

6. Comments:

Facility was shutdown on 03-05-2015 for air stripper maintenance. Facility was restarted on 03-09-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-01-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 5 (PTU5)
AREA TF406

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 753

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-14-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 20.8

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	81	4.5
W-1310	394,774	9.1
Total:	<u>394,855</u>	<u>13.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>394,855</u>

6. Comments:
NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Bethany Padilla Date: 02-13-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 5 (PTU5)
AREA TF406

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>31</u>																
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>					

Total monthly time facility operated (hours): 680

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>02-05-2015</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20.6</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	0	0.0
W-1310	357,581	8.9
Total:	<u>357,581</u>	<u>8.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>357,581</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuhl Date: 03-19-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 5 (PTU5)
AREA TF406

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 776

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-05-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 21.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	0	0.0
W-1310	405,218	8.8
Total:	<u>405,218</u>	<u>8.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>405,218</u>

6. Comments:

Facility shutdown at 08:17 on 03-18-2015 due to a system power up activation.
Facility was restarted at 10:23 on 03-18-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty Kild Date: 04-20-2015

Self-Monitoring Report
LLNL GAC Treatment Unit 03 (GTU03)
AREA TF406-NW

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 743

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-07-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 23.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	213,143	4.8
Total:	<u>213,143</u>	<u>4.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>213,143</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-03-2015

Self-Monitoring Report
LLNL GAC Treatment Unit 03 (GTU03)
AREA TF406-NW

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January	<u>31</u>														
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

Total monthly time facility operated (hours): 226

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	61,794	0.0
Total:	<u>61,794</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>61,794</u>

6. Comments:

System secured on 2/8/15 due to well pump failure. Monthly sampling not performed due to well pump failure.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-17-2015**

Operator Signature: *[Signature]* Date: **04-01-2015**

Self-Monitoring Report
LLNL Solar Treatment Unit 09 (STU09)
AREA TF518-N

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December	30	31																	
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1410	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaguchi Date: 02-02-2015

Self-Monitoring Report
LLNL Solar Treatment Unit 09 (STU09)
AREA TF518-N

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1410	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott K. [Signature] Date: 03-04-2015

Operator Signature: *Don Williams* Date: **04-01-2015**

Self-Monitoring Report
LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)
AREA TF518-PZ

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 506

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	46	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	17	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>63</u>	<u>0.0</u>

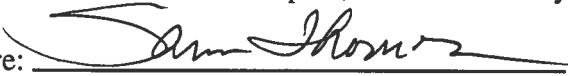
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>63</u>

6. Comments:

Facility secured placed in freeze protection mode 12-29-14 to 1-7-15. Facility was secured 1-27-15 to 1-29-15 as flow matrix tests were being conducted on VTF-518-PZ vapor extraction wells.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-09-2015

Self-Monitoring Report
LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)
AREA TF518-PZ

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January 31
February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27

Total monthly time facility operated (hours): 350

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	20	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	8	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>28</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>28</u>

6. Comments:

VES 19/HDTANK operations secured 2-13-15 at 09:05 in preparation for flow matrix tests on wells in the VTF-518 area. Facility restarted 2-26-15 at 14:30. Water from this facility is transferred to and treated at TFB Main.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Shorne Date: 03-03-2015

Self-Monitoring Report
LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)
AREA TF518-PZ

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 545

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	9	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	7	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>16</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>16</u>

6. Comments:

Pneumatic groundwater pump offline 3-11-15 to 3-18-15 to allow water levels to recover for collection of quarterly groundwater samples. Transferred 638 gallons of groundwater from this facility to TFB main for treatment.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Holmes Date: 04-14-2015

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 1 (CRD1)
AREA TF5475-1

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 7/27/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-02-2015**

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 1 (CRD1)
AREA TF5475-1

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 7/27/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kulin Date: 03-19-2015

Operator Signature: [Signature] Date: **04-22-2015**

Operator Signature: [Signature] Date: **02-06-2015**

Self-Monitoring Report
LLNL GAC Treatment Unit 09 (GTU09)
AREA TF5475-2

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January 31
February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27

Total monthly time facility operated (hours): 506

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-11-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 19.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	77,812	2.6
W-1415	0	0.0
Total:	<u>77,812</u>	<u>2.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>77,812</u>

6. Comments:

System down time for reporting month due to reoccurring controller failure.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-04-2015

Self-Monitoring Report
LLNL GAC Treatment Unit 09 (GTU09)
AREA TF5475-2

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

February 28
March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 779

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-16-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 20

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	119,032	2.5
W-1415	0	0.0
Total:	<u>119,032</u>	<u>2.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>119,032</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Paul Cee Date: 04-01-2015

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 2 (CRD2)
AREA TF5475-3

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1608	0	0.0
W-1609	0	0.0
W-1604	0	0.0
W-1605	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kild Date: 03-02-2015

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 2 (CRD2)
AREA TF5475-3

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1604	0	0.0
W-1605	0	0.0
W-1608	0	0.0
W-1609	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty Kuhl Date: 03-19-2015

Operator Signature: Billy Hill Date: **04-22-2015**

Self-Monitoring Report

LLNL Vapor Extraction System 08 (VES08)

AREA VTF406-HS

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treatment facility operated

December	<u>31</u>														
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	


3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-217	528,538	12.4	-2.13	64	723
W-514-2007A	0	0.0	0	0	0
W-514-2007B	397,518	9.7	-2.5	64	723
Total:	<u>926,056</u>	<u>22.1</u>			

4. Comments:

End month volumes and for extraction wells were calculated from individual flow measurements, and not derived from facility totalizer values.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-11-2015

Self-Monitoring Report
LLNL Vapor Extraction System 08 (VES08)
AREA VTF406-HS

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treatment facility operated

January	<u>30</u>	<u>31</u>													
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>				

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-217	482,810	12.7	-2.31	67	672
W-514-2007A	0	0.0	0	0	0
W-514-2007B	358,006	9.0	-2.55	67	672
Total:	<u>840,816</u>	<u>21.7</u>			

4. Comments:

End month volumes and for extraction wells were calculated from individual flow measurements, and not derived from facility totalizer values. Quarterly vapor samples collected from operating and idle extraction wells 2-11-15.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-12-2015

Self-Monitoring Report

LLNL Vapor Extraction System 08 (VES08)

AREA VTF406-HS

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treatment facility operated


February	<u>27</u>	<u>28</u>																								
March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>											
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>										

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-217	551,686	12.2	-2.26	70	790
W-514-2007A	0	0.0	0	0	0
W-514-2007B	416,567	8.7	-2.46	70	790
Total:	<u>968,253</u>	<u>20.8</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-14-2015

Self-Monitoring Report
LLNL Vapor Extraction System 05 (VES05)
AREA VTF511

1. Reporting Period: Business Month January Year 2015

2. Dates (in **bold** and underline) treatment facility operated

December 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-2204	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	656,316	14.3	-8.5	52	33
W-2208A	0	0.0	0	0	0
W-2208B	584,444	13.6	-8	52	33
Total:	<u>1,240,760</u>	<u>27.9</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 02-05-2015

Self-Monitoring Report

LLNL Vapor Extraction System 05 (VES05)

AREA VTF511

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treatment facility operated

January	<u>30</u>	<u>31</u>														
February	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>					

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2204	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	594,520	14.8	-8.3	58	672
W-2208A	0	0.0	0	0	0
W-2208B	595,740	13.5	-7.7	58	672
<hr/>					
Total:	<u>1,190,260</u>	<u>28.3</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-03-2015

Operator Signature: Sam Thomas Date: **04-13-2015**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month January Week: **1** Year **2015**

2. Dates (in **bold** and underline) treatment facility operated

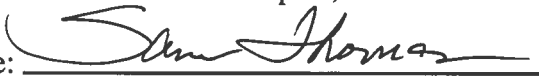
December **27** **28** **29** **30** **31**
January **01** **02**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	36,569	3.6	-18.5	38	169
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	18,284	1.8	-14	38	169
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>54,853</u>	<u>5.4</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-05-2015**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month January Week: **2** Year **2015**

2. Dates (in **bold** and underline) treatment facility operated

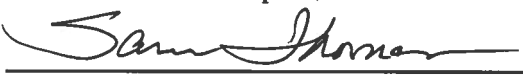
January **03** **04** **05** **06** **07** **08** **09**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	42,263	4.2	-16	59	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	17,106	1.7	-14	59	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
 Total:	 <u>59,369</u>	 <u>5.9</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-05-2015**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month January Week: **3** Year **2015**

2. Dates (in **bold** and underline) treatment facility operated

January **10** **11** **12** **13** **14** **15** **16**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	43,063	4.3	-16	44	167
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	17,025	1.7	-14.5	44	167
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>60,088</u>	<u>6.0</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-05-2015**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month January Week: **4** Year **2015**

2. Dates (in **bold** and underline) treatment facility operated

January **17** **18** **19** **20** **21** **22** **23**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	41,375	4.1	-16	42	168
W-518-1913	0	0.0	0	0	168
W-518-1914	0	0.0	0	0	168
W-518-1915	19,174	1.9	-18	42	168
SVB-518-201	0	0.0	0	0	168
SVB-518-204	0	0.0	0	0	168
Total:	<u>60,549</u>	<u>6.0</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-05-2015**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month January Week: **5** Year **2015**

2. Dates (in **bold** and underline) treatment facility operated

January **24** **25** **26** **27** **28** **29** **30**

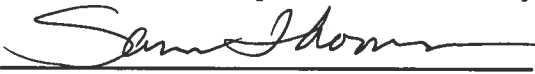
3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	29,110	4.0	-16	60	121
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	13,827	1.9	-18.5	60	121
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>42,937</u>	<u>5.9</u>			

4. Comments:

Facility secured 1-27-15 at 09:15 and configured to conduct Flow matrix tests on extraction wells plumbed to VES 19. Facility operations commenced 1-28-15 at 10:15 extracting from W-1615 and W-518-1915. Estimated volumes extracted during tests are as follows: W-518-1914: 186.96 scf W-518-1915: 116.92 scf W-SVB-204 : 147.66 scf W-518-1913: 40.22 scf W-SVB-201 : 102.24 scf

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-12-2015**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month February Week: 1 Year 2015

2. Dates (in **bold** and underline) treatment facility operated


January 31
February 01 02 03 04 05 06

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	38,912	3.9	-16	59	166
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	19,955	2.0	-18	59	166
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>58,867</u>	<u>5.9</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-03-2015

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month February Week: 2 Year 2015

2. Dates (in **bold** and underline) treatment facility operated

February **07** **08** **09** **10** **11** **12** **13**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	39,144	3.9	-16	49	167
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	20,074	2.0	-18	49	167
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>59,218</u>	<u>5.9</u>			

4. Comments:

VES 19 secured 2-13-15 at 09:05 in preparation for flow matrix tests on wells in the VTF-518 area.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-03-2015**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month February Week: 3 Year 2015

2. Dates (in **bold** and underline) treatment facility operated

February 14 15 16 17 18 19 20

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	0	0.0	0	0	0
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

VES 19 secured 2-13-15 at 09:05 in preparation for vapor flow matrix tests on wells in the VTF518 area. Facility did not operate this reporting week.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-03-2015**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month February Week: 4 Year 2015

2. Dates (in **bold** and underline) treatment facility operated

February 21 22 23 24 25 **26** **27**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	3,854	4.0	-16	45	16
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	1,542	1.6	-18.5	48	16
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>5,396</u>	<u>5.6</u>			

4. Comments:

Facility restarted 2-26-15 at 14:30.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-03-2015

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month March **Week: 1** Year **2015**

2. Dates (in **bold** and underline) treatment facility operated

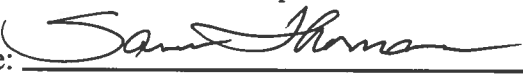
February 28
March 01 02 03 04 05 06

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	40,786	4.0	-17	45	170
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	19,373	1.9	-18.5	45	170
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>60,159</u>	<u>5.9</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-02-2015

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month March **Week: 2** Year **2015**

2. Dates (in **bold** and underline) treatment facility operated

March **07** **08** **09** **10** **11** **12** **13**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	38,984	3.9	-16.5	50	167
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	18,992	1.9	-18.5	50	167
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
 Total:	 <u>57,976</u>	 <u>5.8</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-02-2015**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month March **Week: 3** Year **2015**

2. Dates (in **bold** and underline) treatment facility operated

March **14** **15** **16** **17** **18** **19** **20**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	39,722	3.9	-16.5	58	170
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	20,370	2.0	-18	58	170
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>60,092</u>	<u>5.9</u>			

4. Comments:

Quarterly vapor samples collected from operating and idle extraction wells
3-16-15.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-02-2015**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month March Week: 4 Year 2015

2. Dates (in **bold** and underline) treatment facility operated

March **21** **22** **23** **24** **25** **26** **27**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	38,938	3.9	-16	52	166
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	20,966	2.1	-18	52	166
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>59,904</u>	<u>6.0</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-02-2015

Operator Signature: [Signature] Date: **03-02-2015**

Self-Monitoring Report
LLNL Vapor Extraction System 01 (VES01)
AREA VTF5475

1. Reporting Period: Business Month February Year 2015

2. Dates (in **bold** and underline) treatment facility operated

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
W-ETS-507	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving</u> <u>Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty Kuhl Date: 03-19-2015

Self-Monitoring Report

LLNL Vapor Extraction System 01 (VES01)

AREA VTF5475

1. Reporting Period: Business Month March Year 2015

2. Dates (in **bold** and underline) treatment facility operated

February	28																	
March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15			
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-ETS-507	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kyllid Date: 04-22-2015

Attachment C

Figures

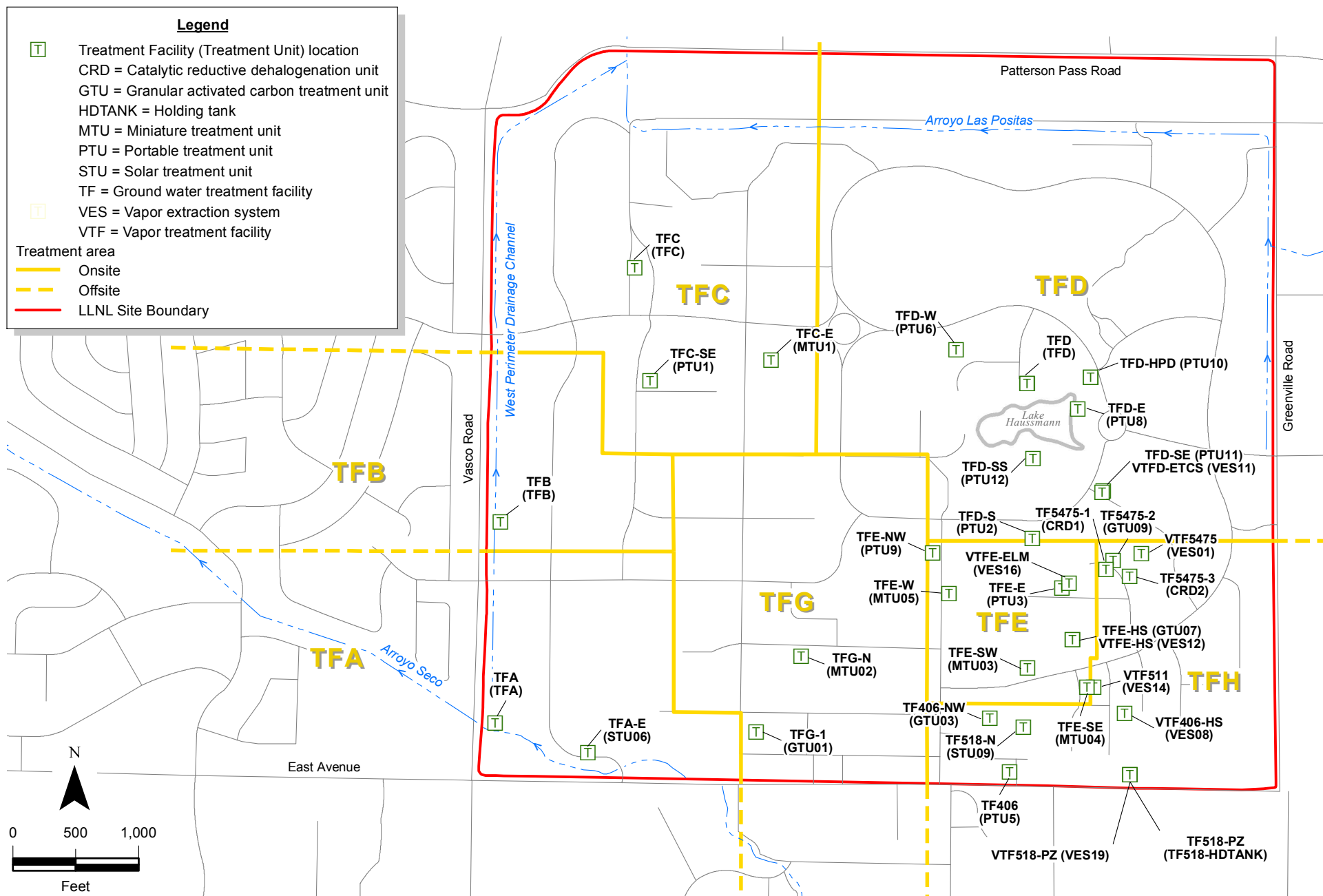


Figure 1. Livermore Site treatment areas and treatment facility locations.

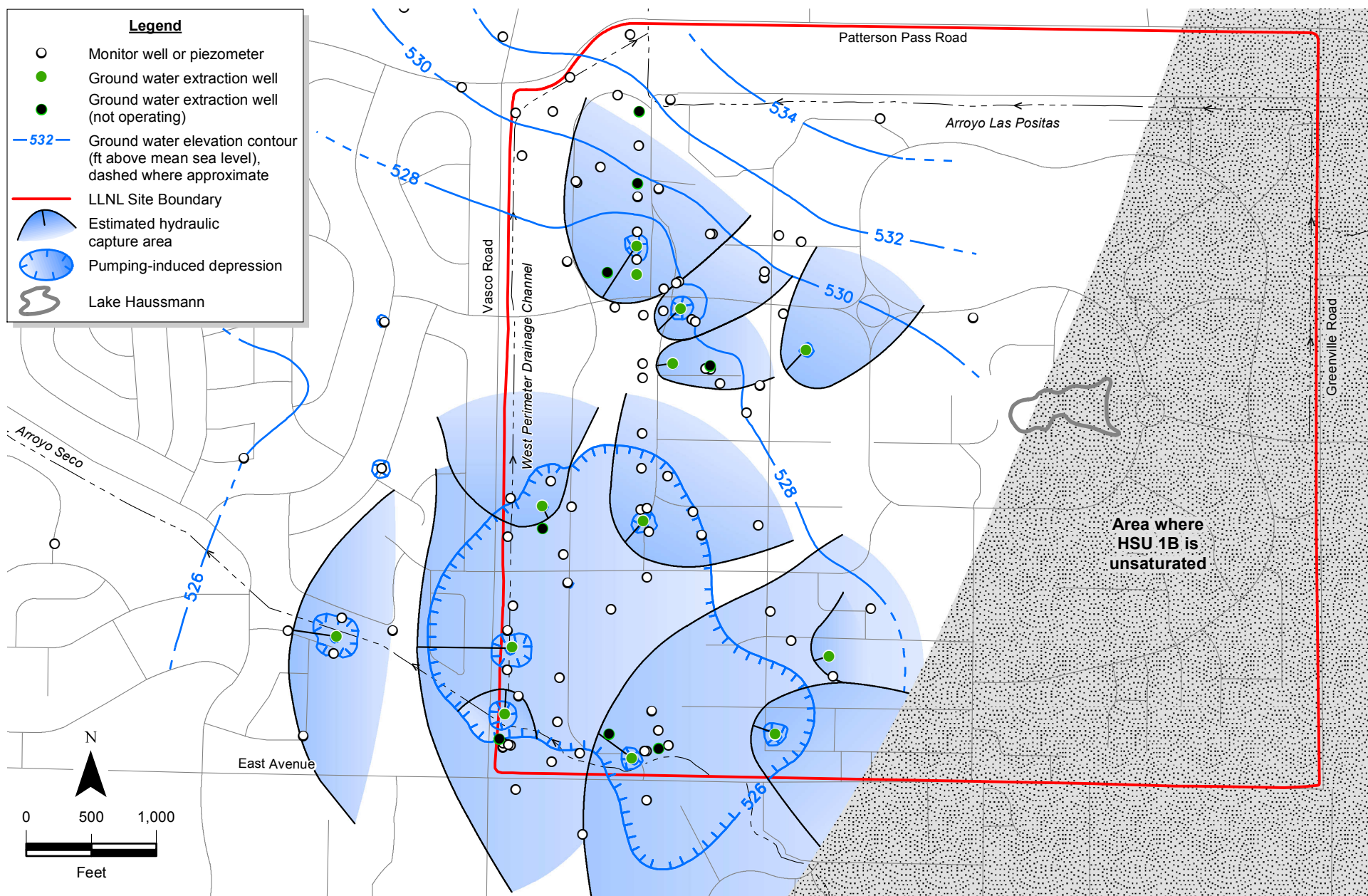


Figure 2. Ground water elevation contour map based on 117 wells completed within HSU-1B showing estimated hydraulic capture areas, LLNL and vicinity, first quarter 2015.

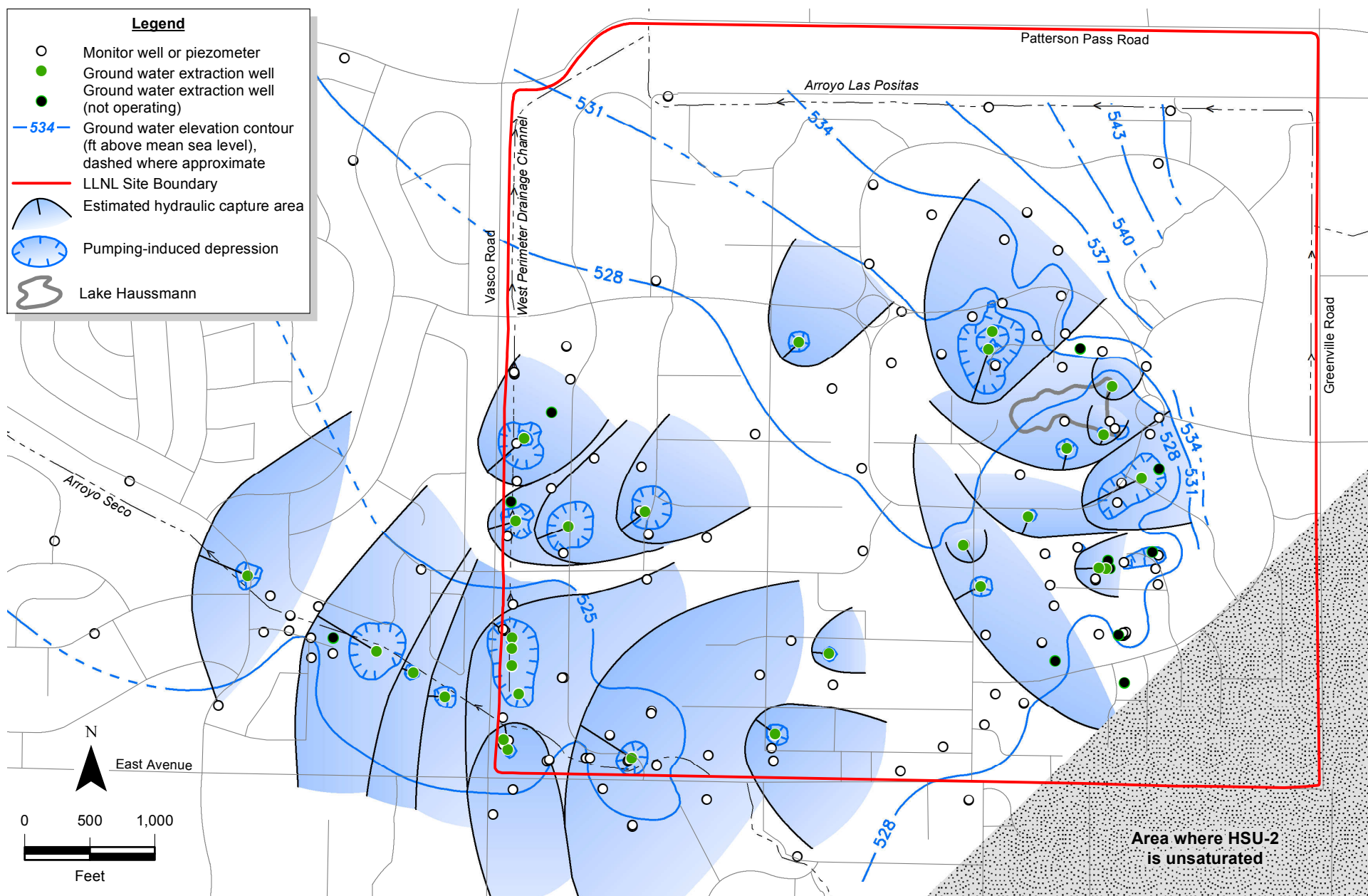


Figure 3. Ground water elevation contour map based on 168 wells completed within HSU-2 showing estimated hydraulic capture areas, LLNL and vicinity, first quarter 2015.

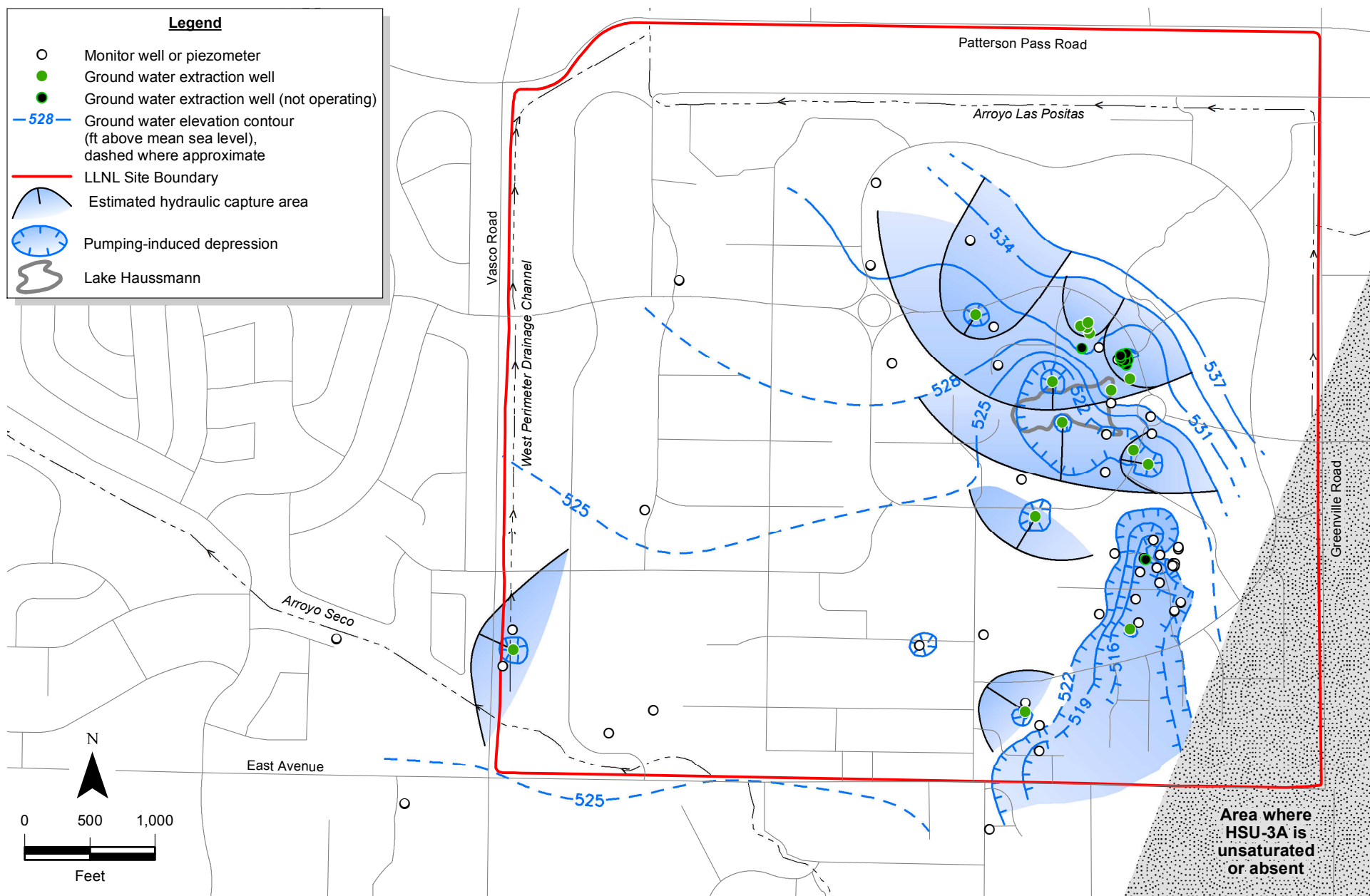


Figure 4. Ground water elevation contour map based on 74 wells completed within HSU-3A showing estimated hydraulic capture areas, LLNL and vicinity, first quarter 2015.

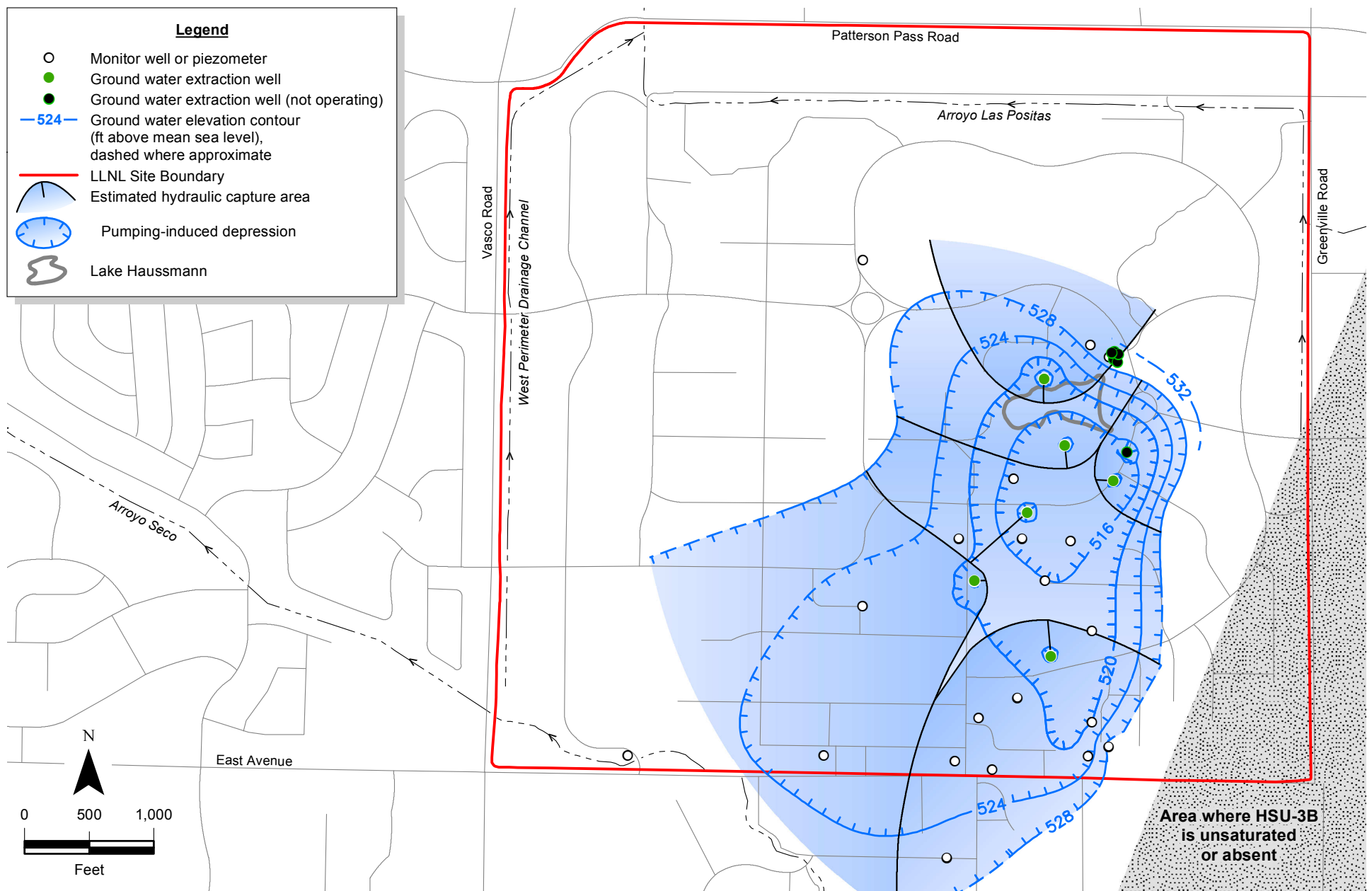


Figure 5. Ground water elevation contour map based on 33 wells completed within HSU-3B showing estimated hydraulic capture areas, LLNL and vicinity, first quarter 2015.

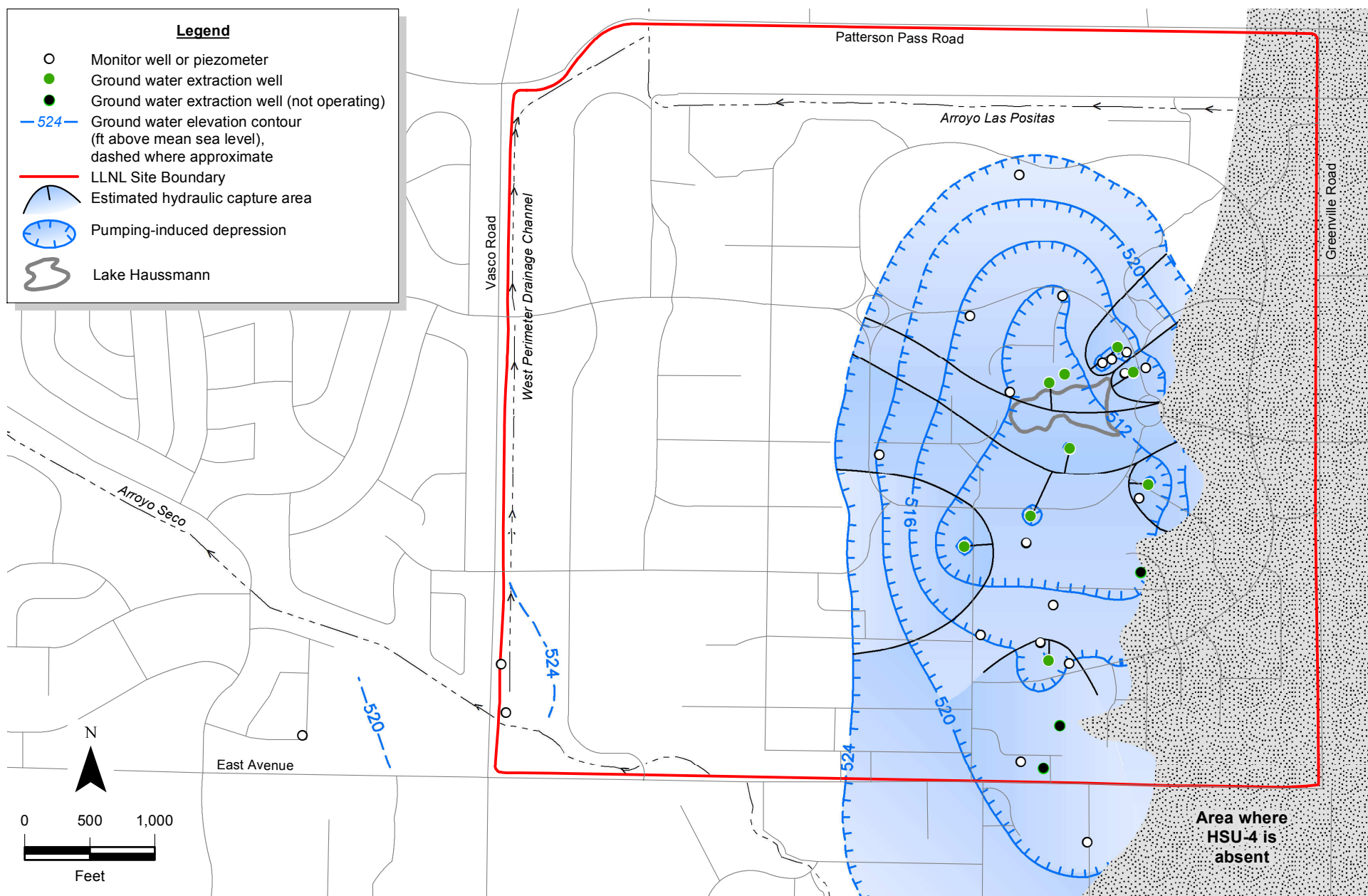


Figure 6. Ground water elevation contour map based on 33 wells completed within HSU-4 showing estimated hydraulic capture areas, LLNL and vicinity, first quarter 2015.

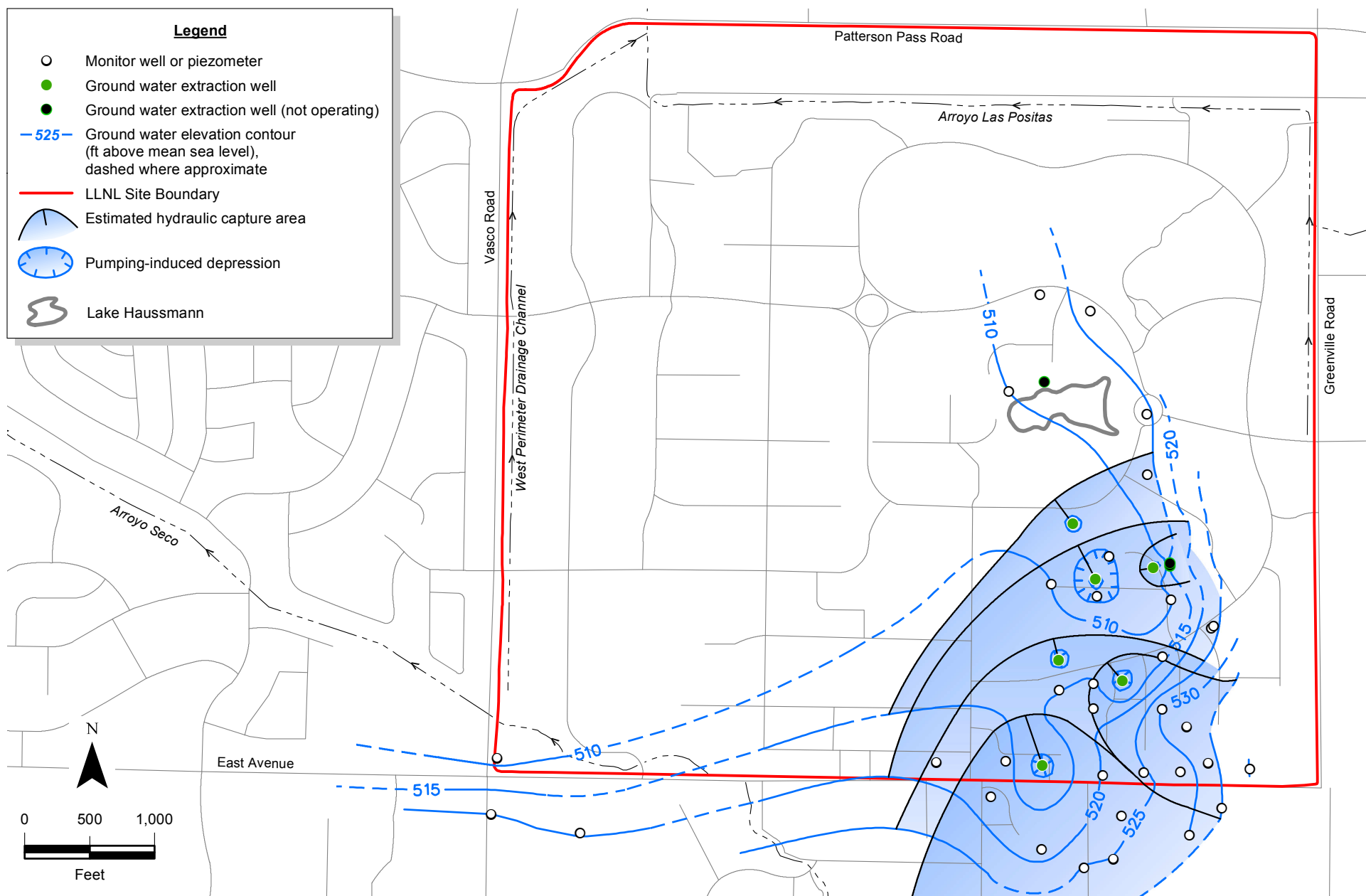


Figure 7. Ground water elevation contour map based on 45 wells completed within HSU-5 showing estimated hydraulic capture areas, LLNL and vicinity, first quarter 2015.